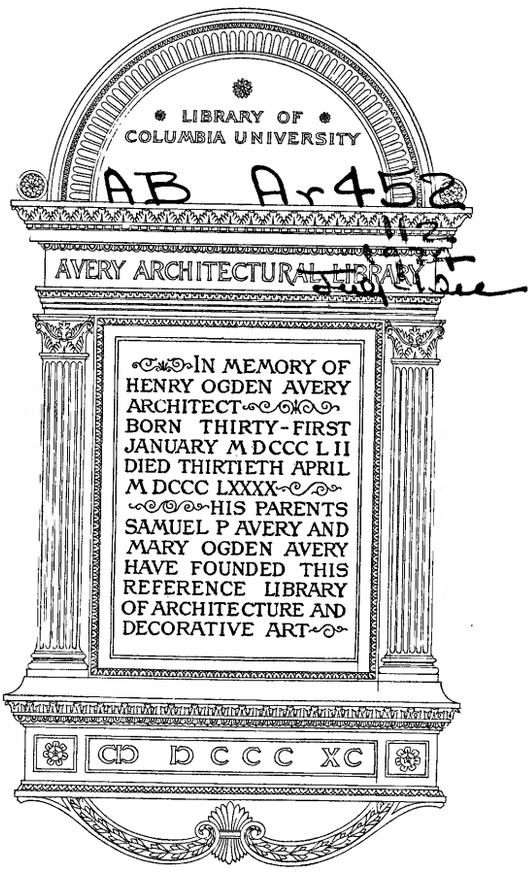
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MESSRS. LIBERTY'S NEW PREMISES, ARGYLL STREET, W. MESSRS. E. T. & STANLEY HALL, Architects.

A Conflict of Difficulties.

The threatened interruption of the building industry by a lock-out and the constant and reiterated expressed desire of the present Government suggests a method to us which would, while rendering necessary the recasting of the Government's Housing proposals, perhaps end by giving everyone what they desire.

Building costs are something like double what they were before the war, while those in authority want to keep down the rental value of housing to its pre-war level. Obviously this must either be done at the cost of the community—which many of us would say, to use Euclid's expression, is absurd—or by using a means to obtain housing in some cheaper manner. If we could devise such a solution, no one would have much to say against the launching of a Government programme to attain that end, but we may reasonably object to the present proposals, which mean an immense expenditure which will fall on the taxpaying classes, and which incidentally also mean stiffening the backs of the trade unions and inducing them to make demands which will enhance the cost of building to the whole community.

We have at the same time an immense amount of unemployment, which everyone must desire to see lessened and which hangs like a millstone round our necks, besides having a most deteriorating influence on the unemployed themselves.

But if by any device these unemployed could be drafted into the ranks of the workers, a great good would be effected; and if building the houses wanted could be so simplified that they could be built by those unaffiliated with trade unions, there need be little

call on a class of men who are fully employed on remunerative private work and who have shown the strongest objection to systems of dilution.

The late Government's Housing legislation is to be looked on as a temporary means by which housing these helps the average working man's house remains a difficult if not impossible problem in the matter of finance.

We suggest that we should scrap our ideas of building with ordinary materials and consider the advantages

MESSRS. LIBERTY'S NEW PREMISES, ARGYLL STREET, W. MESSRS. E. T. & STANLEY HALL, Architects.

by the Government was to be gradually limited and finally abandoned, leaving matters to private enterprise as before the War. Many of us have the conviction that this would be the best solution of all, but it may be that recent events have made it impracticable, because expectations and hopes have been encouraged by the Government's action, and any administration following it will have to take this fact into consideration.

The solution which is possibly open to us is one which may be regarded with disfavour by many architects, as it would largely eliminate the necessity for their assistance; it would also be objected to by the unions of the various crafts. But, despite this, it may yet be the best solution of many difficulties.

The Ministry of Health from time to time have given latitude in the interpretation of bye-laws in order to cheapen building; architects have cut down work to a minimum, while the size and extent of accommodation have in some cases been reduced to what we feel to be a doubtful minimum; yet with all of building in wood to designs which are rigidly standardised, and that concrete constructional systems should be more fully utilised in order that we should escape our present thraldom to the bricklayers' demands; or that, alternately, methods should be utilised to enable the untrained to build the simpler forms of brickwork by such a system as we described recently, under which one man could lay several thousand bricks in a day.

By the use of such means, carefully devised and efficiently carried out, we believe it might be possible to reduce the cost of small house building to a figure which could be covered by such rentals as can admittedly be obtained from the working classes. If the cost of a workman's house could be cut down to something like £250, we see little reason why rents could not be obtained which would cover cost of building and interest on the sums expended.

Local bodies might be asked to provide suitable sites as their contribution to the solution of the problem,

and their surveyors might be asked to lay down small schemes all over the country which would render these colonies of workingmen's houses reasonably suitable and not damaging to the localities in which they were situated.

Able-bodied men, instead of being paid the unemployment dole, should be employed on these schemes, where they would quickly learn the rudiments of simple building, and where the efficient among them would gradually earn a right to a better rate of pay than their fellows. In other words, our suggestion means that this branch of building should for the time being be organised on entirely different lines from that which governs more complex building problems, and we should have due regard for the undoubted fact that a working man's house need not necessarily be regarded as a building which should have a life of several hundred years, but rather as one which would have a duration placing it between that of temporary and permanent structures. Of course, organisation of such a scheme would need skilled experts, which could probably be effected with the co-operation of both architects' and builders' associations with the officials of the Ministry of Health. We believe that were this done both builders and architects would recognise the great advantage of eliminating the very difficult political and economic factors which are unsettling their normal business, and that the organisations of both would be willing to render effective aid to the nation.

This would leave the building trade to settle its ordinary affairs voluntarily and by the usual methods of negotiation and agreement, without its being possible to claim that either was standing in the way of the nation's good. An exceptional position calls for exceptional treatment, and what we have here very briefly referred to may suggest a means of escaping from our present difficult position.

Our Illustrations.

PERSPECTIVE DRAWING OF THE COMPLETED LIVERPOOL CATHEDRAL.
LIVERPOOL CATHEDRAL: THE REREDOS.
LIVERPOOL CATHEDRAL: THE BISHOP'S THRONE. G. Gilbert Scott, R.A., Architect.
NEW CHURCH, AMPLEFORTH ABBEY, YORKS. G. Gilbert Scott, R.A., Architect.

New Church, Ampleforth Abbey, Yorks.

G. Gilbert Scott, R.A., Architect.

Only one-third of the entire scheme is at present being undertaken, and this is being built on the west end of the existing church, the present west wall being pierced with a wide arch to connect the old work with the new. Broadly speaking, the completed building will consist of three large compartments or bays, separated by transverse arches and roofed with domical vaults. The vault over the central bay will be at a higher level than those over the two end bays, and above will rise the central tower. The western-most bay (the one now being built) will form the monks' choir, while the central and eastern bays will accommodate the boys from the College and also the public.

Along the south side of the building will be two rows of chapels, one row being level with the floor of the church, and the other placed in a crypt below; this arrangement was suggested by the steep slope of the ground. One of the chapels at the main floor level will be the War Memorial chapel, which, it should be noted, is included in the present section of the work. The walling will be faced externally with rubble-work, with wrought quoins and dressings. Bramley Fall is the stone used both for rubble and dressed work. Internally the walls will be plastered, the piers, arches and other dressings being of blue Hornton stone; the domed ceilings will be of reinforced concrete, plastered, while the outer roof will also be of reinforced concrete, covered with greenish grey slates. As regards the question of style, an early type of Gothic has been adopted, with a suggestion of Romanesque feeling, though no round arches have been employed. Internally the most distinctive feature will be the reredos. This will stand in an isolated position at the junction of the retro-choir and the main body of the church. It will take the form of a large arch embellished with sculpture and carving, and will form a kind of canopy over the two altars which will be placed back to back below it; one of these altars will serve the retro-choir and the other the main body of the church. The reredos will be constructed of blue Hornton stone. Our illustration shows the reredos and its position as above described. We expressed our disapproval of the position this very clever drawing occupies at the Royal Academy exhibition, the same being surrounded by other drawings which are out of sympathy with Mr. G. Gilbert Scott's picture. The artist, Mr. Cyril A. Farey, has used the granulated colour tone effect very considerably in connection with this drawing; by printing our reproduction in a tone of green we hope to minimise the rather unpleasant effect of this granulated tone effect. In black and white the reproduction does not convey any of the beauty of the original drawing. The general contractors are Messrs. Holloway Bros., Ltd. The blue Hornton stone is being supplied and worked by Messrs. J. F. Booth & Son. The reinforced concrete engineers are the Trussed Concrete Steel Co., Ltd.

Notes and Comments.

Liverpool Cathedral.

We need not further add to the excellent analysis of the impressions produced on an architectural critic by the new cathedral, but we may say that the public Press in its anxiety to find something "new" is more than usually wide of the mark in the criticism expressed. We can detect no merging of Gothic and Classic in the design of the cathedral, but rather the result of some generations of thought and investigation into the principles of mediæval architecture. The one classic principle recognised and followed is that great size should be expressed by the enlargement rather than multiplication of usual features, while the general lines of the plan are dictated by the modern want of a large and uninterrupted congregational space as opposed to a plan mainly devised to give an appropriate setting for the ritual of the church. The simplicity and clear expressiveness of the whole design is but the evidence of the skill of a great designer. Liverpool is fortunate in the failure of the earlier attempts to carry out a great cathedral scheme. The former competition which resulted in the selection of a design by Mr. Emerson would have given Liverpool a cathedral which would in no way compare in excellence with that now partially completed, an outcome inevitable in the period when the first competition was held, while the very able conception of Messrs. Bodley and Garner was marred by similar shortcomings.

We hope that the munificence of the great merchant princes of Liverpool which has enabled the present scheme

to be carried so far will be expended to the completion of the scheme and that Mr. Scott, like Wren, may in his lifetime see the completion of his great conception.

Liverpool Cathedral may have an influence not only in the limited field of ecclesiastical architecture, but in the wider field of the formation of a natural style, for it is an emphatic protest against narrow stylism, while it gives a negative to the idea that symmetry and dignity can only be achieved by those who follow the high road of classicism. We hope as time goes on to see what we may call pedantry of design broken down, and that without searching to find new and weird methods of expressing modern wants we have inherited an ample architectural language from the past, and new wants and requirements can be expressed by skilled designers without the invention of what may be described as architectural "slang," which is only the feeble resource of those who are bereft of true imagination.

The Building Situation.

There seems to be evidence that the threatened lock-out by the builders may be averted, but we hope that this will be effected without a "bargain," for the eleventh hour settlements by which trade disputes have been so often averted are too commonly but preludes to further trouble. The gradual reductions by which it is proposed to meet the Liverpool difficulty are spread over so long a period of time that they can inflict little or no hardship on the men concerned, and had the Liverpool difficulty been the only case where the operatives had stood out against national settlements we may be sure that the employers' associations would not have taken the action they have, but Liverpool is only an outstanding and prominent difficulty in a general condition of unrest. It is always difficult to isolate trouble, but we are convinced that it is impossible that trouble can be averted if we are always to live under the promise of a huge housing programme to be financed at the expense of a section of the community. It is for this reason that we believe it necessary to entirely divorce what—if it is to be—is a huge measure of philanthropic assistance by the State from the ordinary business affairs of the community which are matters of supply and demand. A huge scheme like that of Mr. Wheatley's cannot be carried out by ordinary methods without disorganising everything else, but if it were so organised that it could be carried out under a proper organisation apart from the ordinary methods of the building industry and with every help that standardisation could give it might be another matter. We have frequently expressed the conviction—which we share with many—that these difficulties have chiefly arisen because the State has interfered with matters it should have left alone, but by so doing we may have travelled so far along a wrong road that it would be better to try to join the right road farther on, not by turning back, but by modifying our plans.

Our American Visitors.

Speaking to some American architects recently who were visiting this country, we were requested to name some recent work which would, in our opinion, justify a special effort on the part of our visitors. We were rather at a loss to name a number of buildings, specially after they informed us that they did not consider the Port of London Authority building representative of the spirit of English architecture; that they found little to interest them in Regent Street, and the Royal Academy Exhibition contained nothing inspiring. We mentioned Adelaide House, which our visitors intended to inspect. We trust they will find something of interest. Possibly their footsteps will be guided towards the Anglo-Persian Oil Co.'s building, "Britannic House," Moorgate Street, where even an American might be moved to praise. Some of us have never been to the United States and can only judge or form an opinion of their work from the illustrations we see in the American journals.

Possibly we might find so much beautiful work on the other side that it would be quite a relief to come back to London and look at the Pavilion in Piccadilly. Our American architects were enlarging on the superiority of most of the American railway stations, comparing the Pennsylvania Station, New York, to our Euston, St. Pancras, King's Cross, Waterloo, Paddington, etc., to their disadvantage. We listened patiently to their eloquence and suggested that they were not fully qualified to criticise until they had seen Ludgate Hill Station, which they made a note to visit. From the films which are produced in America we frequently obtained a sight of some very poor American architecture and their interior decorative work is not nearly as far advanced as our own. They most certainly have not a very great sense of rest in their decorative expression. To-day simplicity dominates the English decorative movement. We have left the lavish and overloading period some years behind. Everything that is used to-day must be of individual beauty and charm. Even in the modest homes the feeling and desire for simplicity finds a great many friends.

Leaded Lights.

This treatment of windows is returning vigorously to favour, if it can truthfully be stated ever to have been out of fashion. True, unless well made and carefully designed, they have been known to let in the rain. As a decorative feature they can be made to add considerable charm to a building. In the hall and on the staircase, as well as in the dwelling rooms, they can be very effectively used.

Wooden Houses.

Periodically wooden houses are mentioned in the Press as a possible solution of our housing difficulties. We cannot see why they should not be utilised in large numbers. If only as a temporary measure. From an artistic point of view we would advocate their erection, because the present permanent housing scheme dwelling is a blot on the landscape, and possibly in ten or twenty years' time the conditions which prevail to-day will most likely be altogether changed; though why wood and asbestos sheeting, tiles and slates should not be used in conjunction for the purpose of erecting permanent houses it is rather difficult to understand.

Shopping at the Railway Stations.

We read that a Parliamentary Bill is being promoted whereby powers are being sought to make some of the London suburban stations brighter by the addition of up-to-date shops. At Waterloo many fine shops have been built within the station, and no doubt all parties have been satisfied. From an architectural point of view we welcome the scheme, as it may lead to some rather ugly stations being entirely rebuilt. The Richmond Borough Council are keenly alive to the possibilities of the movement and when we recall the present station we are not surprised that the authorities should desire its improvement or better rebuilding.

Bank of England and Princes Street Widening.

Notwithstanding that the London County Council has refused to contribute anything to the cost of widening Princes Street, the Improvements Committee of the City Corporation has resuscitated the proposal. This week the Corporation was recommended to serve "forthwith" the notices to treat for acquisition of the ground needed for the widening. It will be recollected that the attitude of the Bank of England authorities is that, if the proposal is persisted in, they may have to reconsider entirely their rebuilding scheme, since the widening would necessitate the demolition of the Bank "wall" in Princes Street. Discussion of the Committee's recommendation was adjourned till the next meeting of the Corporation. In the meantime, Lord Bearsted has tabled an amendment to the Committee's recommendation in the following terms:—"That the reference to the Committee be discharged, and the Bank of England be informed that so far as the Corporation of the City of London is concerned, they may proceed with their plan of rebuilding, subject to the Corporation obtaining an undertaking from them that they will not apply for permission to make an entrance for vehicles from Princes Street." Lord Bearsted's amendment will be considered at the next meeting of the Corporation.

LIVERPOOL CATHEDRAL FROM THE EAST END. G. GILBERT SCOTT, R.A., Architect.

Liverpool Cathedral.

This great undertaking now approaches the end of the second stage of its realisation. The first stage was reached when the Lady Chapel was consecrated in 1910. Now the choir and eastern transept, with the chapter house and other subsidiary buildings grouped under the east end, are ready, and are to be consecrated on July 19. The Cathedral is now open for public inspection until June 28, when it will be closed during its preparation for the formal opening.

This event marks an epoch not merely in the building of this cathedral, but in the architecture of England, if not of the world. It is without doubt the greatest Gothic monument erected since the Reformation; it is the only English cathedral since St. Paul's to be conceived and carried out on the scale of its mediæval prototypes; and in itself it is the culmination of two generations of effort and striving on so large a scale that in success or failure it would be great.

We went to Liverpool with the reverberations of old controversies in our ears. We recalled the battle of styles fought all over again when the competition was about to be launched—the last fight of the time when men still thought that art could be martialled in two opposite camps with nothing but antagonism for each other. The inevitable criticisms of the winning design have all but passed out of memory, for it was big and forceful enough to win its way to general appreciation; but the fear and trembling with which the immense responsibilities of the scheme were placed on the shoulders of a young man of 21—despite the example of Elmes—still remain a rather amusing memory. For though St. George's Hall killed the young Elmes, it seems as though Mr. Scott's responsibilities at the Cathedral will last him well through a lifetime. Only half of his work, after twenty years, is yet built, and he will be fortunate if in another twenty years he sees the work completed.

Though it is only a fragment, Liverpool has a great cathedral, which has a certain completeness even as it now stands, and a greatness and impressiveness undeniable. The fact that its ultimate dimensions surpass even the great Continental Gothic cathedrals does not concern us at the moment, except that it has set the scale of the whole, so that this sense of size is felt throughout this fragment. But the great dimensions are so skilfully handled, there is such poise in the proportioning of parts, in the contrast of mass and void, of plain surface and ornamentation, that it is not so much as mere bigness that the size of the building is felt, but as greatness and sublimity. What matters most, however, is that Mr. Scott has got down to the elementals of architecture: he has not merely adopted the shapes and formulas that tradition has brought on to our time and which were ready to his hand, but his mind has worked among the basal, fundamental matter of his problem—below self-conscious expression, below the veneer of forms; and though, working up from this, he has fallen under certain obvious influences and some stereotyped forms have been pressed into service, every detail of the Cathedral is so clearly the outcome of the sincere working of an artist's mind on the intrinsic facts of his problem that a wonderful unity and a compelling sincerity have been achieved. And here one may recall that there were those who seriously proposed that the Cathedral should be in the Gothic style, preferably in the thirteenth-century manner.

As we begin to realise the splendid vitality of the building we see how much of it is due to the development of the mind of the architect during twenty years of his life, here visible before our eyes. And we see this unfolding if we approach the Cathedral in the way in which it should be approached. We have seen its mass, perhaps, from the river, its rose-coloured flanks gashed with the fine shadows of the buttresses and windows, and as we make our way through devious streets, and eventually through mean properties, up the hill to where it stands, we recall the picturesqueness and youthful romanticism of the competition design, its skyline broken by towers and transepts, and compare it with what we have already seen of a gaunt square mass with a hard straight line against the sky, and we think that Mr. Scott was among the fortunate few who sowed their wild oats on paper before they came to build. Suddenly the Cathedral is before us; but it is the Lady Chapel that we see, a fair-sized parish church in itself. Its inspiration is clearly from such buildings as the Sainte

Chapelle in Paris, or our own later Gothic buildings compounded of buttresses and windows, like King's College Chapel at Cambridge, with suggestions from Albi Cathedral. The wall surfaces are severe, the buttresses strong and with carefully graded outline; the motive is quite orthodox, the treatment of the windows mildly flamboyant, and we see for the first time the architect's penchant for the sharp contrast given by the rather wiry-looking tracery of the parapets with the plain wall faces—a contrast which is so decided that it emphasises rather the thinness of the tracery than the massiveness of the wall. Nevertheless there is an unmistakable mastery in the handling, a strong individuality in the treatment of detail; and though we are conscious of much more portentous happenings in the background, of something of immensely more importance and significance, for the moment we are held by the delightful fancy of this charming satellite church which fourteen years ago became the Cathedral. So we enter at its west end and find the type of interior which the exterior indicated; tall bay divisions with long deeply set windows, the flamboyant tracery leading to rather similar vaulting, sturdy arches below, and a wealth of exuberant foliated ornament above, leading on to the riotous ornamentation of the reredos. It was fitting that the architect could work off his high spirits in this interior. We do not now take it so seriously as at first, when it was the Cathedral. In its main lines it is on strongly traditional lines, and it is in the detail that Mr. Scott has given his fancy full play, not stopping at over-luxuriance, even sometimes at frivolity, in his eager quest for richness and interest. All the time his mind, perhaps a little restless under pressure of the far greater problems beyond all this, must have been feeling its way to a sounder footing, a greater certainty of the ultimate realities of structure and composition. As we now pass into the choir, where sterner stuff rises immensely around us, we are glad of the intimacies, the fancy, and the Baroque of the Lady Chapel. They had their place—they are there to be enjoyed when we want them again; but as we emerge gradually from the aisles out into the great spaces of the transept, and the vastness of the choir comes suddenly upon us, those other things are forgotten. This interior has tremendous impressiveness, and glows through and through with a sort of splendid virility which marks its author's maturity. All the riotousness of the Lady Chapel is purged away; and while there is infinite fancy in the detail, it is all so carefully subordinated to the mass that it is never too assertive, and there is never the least suggestion of coarseness. There is much that is daring in the extreme. In most mediæval churches the window mullions give the scale as much as any other part; yet here we have enormous windows of two or three lights, themselves on a gigantic scale—and on a photograph, or if we for a moment forget the scale which we give by simply being there ourselves, we sometimes find the interior shrink momentarily in scale as we revert to our old mullion standards. But when we grasp other details these wide fields of glass take on a vastness of their own.

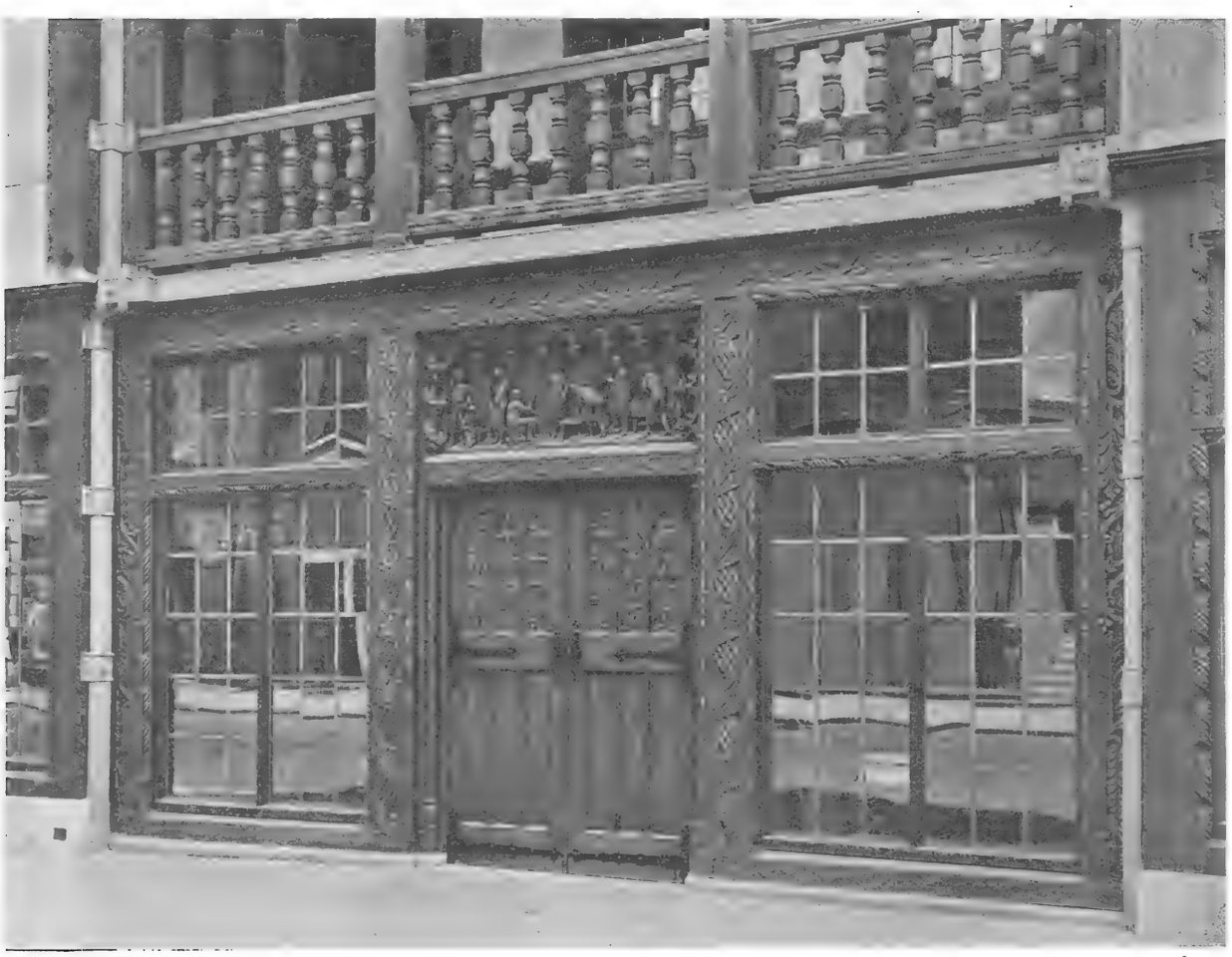
Until the building is complete the articulation of the vaulting and of the system of bay divisions cannot be fully realised. The three bays of the choir, of course, explain themselves, and the transept crossing it at its west end seems like a very majestic and overgrown narthex, but we know that this is really part of the central space which is to come next, and this section of it indicates a hugeness which our imagination can hardly grasp—but we return to what is already there.

When we examine the detail of the ornamentation we do not feel ourselves so much on the plane of inevitableness as we do when the whole conception has our minds in its grip. Much of it is very beautiful, it is all very much alive, it plays its part in the general composition well-nigh perfectly, and thereby fulfils the most important function of ornament. It scintillates like Byzantine detail, and with much the same sort of hard brilliance, yet it has not that ageless quality that Byzantine and Greek detail has. It is very much of its own time and kind. It is doubtful whether anything finer is within reach until some new impulse comes into or from our life, and works itself through the very being of two or three generations of artists and craftsmen until it comes through as a true and vital expression of the spirit of our life. As it is this ornament is based on the tradition of fourteenth-century work, picked up at some point before it stiffened and died; there is in it a good deal of the admirable work that developed in later stages of the Gothic revival, in Bentley, Bodley, and Temple Moore, on which Mr. Scott has superimposed his own abounding invention, as we saw it in the Lady Chapel; and then he has sobered it, shorn off its exaggeration, and has brought it in as an excellent foil for his great wall spaces. It is more vital than nearly all other modern detail, whether Classic or Gothic, for it is not stereotyped and selected. Take, for instance, the three points where its richness marks a climax—the great reredos under the east window, the bishop's throne, and the War Memorial reredos in the transept. Though the dimensions are so large, Mr. Scott has put aside his subservience to constructional forms almost at the beginning. They are each a vivid improvisation. The main arch of the reredos, before it can stiffen into formality, is given a slight ogee point at the top, and after that all is invention and richness; the bishop's throne and the smaller reredos are hardly designed on structural forms at all—their subordination to the great piers about them removes all necessity for this—and yet there is no suggestion of weakness or insecurity. We see Mr. Scott's fondness for shimmering lines of cresting, out of which project short sharp pinnacles against deep shadows behind. All the detail is exquisitely careful, abounding in charm and invention, sparkling and rich, but it is not so much better than what has been done before as the Cathedral is. We must remark here how it has all fallen back into its place since the temporary west wall was built. When the west end was open the whole interior was much too brilliantly lighted, but now its balance and emphasis is wonderfully calculated. The warm rose colour of the stone, the limed oak, and the well-chosen marbles of the floor, together with the great windows, make a sober but charming colour scheme.

We have not space to deal now with the delightfully interesting ambulatory and chapter house and other buildings at the east end. We must pass outside again, and look at the exterior as a whole. We can now take in the great masses which earlier we realised as towering up behind the Lady Chapel. We shall walk round to the other side of St. James's Cemetery, so that the Lady Chapel and outlying buildings at the east end build up properly in support of the cliff of the east end, and where the slender windows of the earlier building act as a foil to the great east window. Here we feel the value of the smallness of parts in the design of the Lady Chapel in giving scale to the Cathedral itself. Again we feel the sure mastery of a mature mind—there is no hesitation or timorousness about anything, and the only thing that jars is the conical roof of the chapter house. The buttresses climb in receding steps from the cliff on which the building stands, framing in the black spaces of the windows, past the traceried balconies near the eaves to the ruthlessly straight roof line, broken only by two abrupt conical pinnacles and the hardly perceptible slope of the east gable. From this point the Cathedral, even as it stands to-day, is a complete and satisfying composition of extraordinary impressiveness.

There have been published one or two drawings of the completed building showing various projects for the central tower, which takes the place of the more picturesque pair that were shown on the competition design. A great structure, working up to an octagonal shape, has been forecasted; and it is quite evident that this climax of the whole building has had the most searching thought. A drawing has been published bearing the date of the present month, but we presume that it is only a step in the whole process. It seems to us to revert to stereotyped forms, and the upper part, with its meaningless gable starting out from a multitude of small windows, takes us back to the least inspired years of the Gothic revival. The mag-

1924 ROYAL ACADEMY EXHIBITION DRAWING.



MESSRS. LIBERTY'S NEW PREMISES, ARGYLL STREET, W. MESSRS. E. T. & STANLEY HALL, Architects.

nificent breadth of the transepts below and of the lower stages of the tower seems to call for a nobler treatment above.

There can be no doubt that this cathedral will have tremendous influence upon architectural development not only in England but in Europe and America. Its influence has been very strong in recent American Gothic work, but we feel that because of its fundamental greatness and sincerity, its splendid unity, its freedom from the limitations of style and period, it will link itself up with all those influences which, especially on the Continent, appear to be leading us to modes of expression more closely related to the reality of structure and form than those which have merely been borrowed from the past. As we have seen, Mr. Scott uses old forms both of structure and detail, but he has brought them into the heart of his problem instead of veneering them on its surface. We feel that his expression takes those forms because he is an Englishman and is building a cathedral, and because this is the way he thinks and this the language he speaks, and not because he has in cold blood adopted this mode of thought and this speech. And so as we go again into the city and pass St. George's Hall, we realise that, while Liverpool may have the greatest Renaissance building and the greatest Gothic building in this country, the two are strangely, but in very truth, akin. JAMES T. HALLIDAY, A.R.I.B.A.

NOTE.—Throughout the foregoing article the points of the compass are used in their liturgical sense. As is well known, the "east" end points to the south.

New Premises for Messrs. Liberty & Co., Argyll Place, W.

MESSRS. EDWIN T. HALL & STANLEY HALL, Architects.

Just behind the now fast disappearing East India House in Regent Street, which has figured so long in the minds of all lovers of things beautiful, Messrs. Liberty have erected a half-timber building, of which we include in this issue some, in our opinion, rather interesting views taken specially for THE ARCHITECT. The new premises occupy an island site, bounded by Argyll Place, Great and Little Marlborough Streets, and Kingly Street. The elevations are in striking contrast to Messrs. Dickins & Jones' new premises. Messrs. Liberty have always possessed a very unique reputation for exclusive artistic productions within their range of articles. And, as if to accentuate this note, they have had built for themselves a building which is unique. We have heard many different opinions on the building within the architectural profession, but public opinion has expressed only admiration for the premises, and with this latter opinion we are inclined to agree. The public seem to have realised the whole purpose and idea of the new premises. Architects make use of the many different styles and adapt them to the needs and requirements of present-day conditions. Messrs. E. T. and Stanley Hall, architects, have made use of the very picturesque Tudor style, and whilst some may think they have spread themselves a little in the matter of scale, we feel that they have applied the style in a very able manner and have introduced the Londoner to a real piece of old Chester. To adhere slavishly to any style is to-day almost impossible and altogether unnecessary. Nobody should be ready to admit that the men of the past produced better work than can be designed to-day.

The futurist and the futurist movement is a direct result of a desire to break away from traditional expression; and in this respect the futurists are to be admired and respected. Everyone admits that the past produced some very beautiful buildings, and that in certain directions ornamental forms reached their most perfect expression. Examples exist which the mind of man cannot improve upon. But as men created and perfected these examples, surely we are not obliged to stand still and be content to use only these forms and styles? Surely it is permitted to use the spirit of a style and apply the same to our present-day needs, and, provided the new is well balanced and depicts fine proportions, surely there is no occasion, because the building is very possibly higher than any Tudor house ever was, to condemn the whole as bad architecture.

To-day we possess advantages as regards materials, and these materials make possible structures which were never thought of in the Tudor or even Victorian times. Would the Traditionalists deprive us from using the beauties of the past because we cannot limit ourselves to the scope that governed former efforts? It appears that progress is tolerated in every other branch of life except in Art. In painting Realism still dominates the majority. There are still more people who will appreciate the appeal of the subject rather than the merits of the mode of expression. And in architectural art those who desire to use a certain style must take no liberties with the same unless they wish to lay themselves open to an avalanche of condemnation. But some are full of courage and seek to make use of the beauties of the past. And it is in this sense that the new premises appeal to ourselves. We are told that Mr. Kruger Gray and Mr. Laurence Turner contributed to some of the decorations; of the former we can truthfully state from personal knowledge that very few could have studied the subject more carefully. From his earliest student days Mr. Kruger Gray always exhibited a keen pleasure and delight in the truthful representation of historic details. One has only to visit the studio and workshops of Mr. J. L. Emms to be convinced of the sincerity which fills this craftsman's nature.

Internally the new premises exhibit a wealth of carved oak and teak; oak stairs with solid steps and carved balustrades and panelling; tiers of deep galleries about open wells covered with heavy hammer-beam roofs, with linenfold and other carved dadoes. Messrs. Liberty have themselves largely designed and made at their Highgate workshops the panelling and fitments of the interior; and there is much interesting fibrous plaster enrichment to the friezes and ceilings of the showrooms. The building satisfies all the L.C.C. and Westminster City requirements as to hygienic, fire-resisting, and fire escape requirements. There are four main staircases serving all floors, three subsidiary staircases, and four lifts. The interior is divided into eight fireproof compartments, and there is a total floor area of about three acres. A sprinkler installation is installed throughout, and an automatic fire alarm rings to a fire-call station.

The entrance to the building is immediately opposite the lower end of Argyll Street. A large oak screened vestibule opens into a central gallery, open from the ground floor to the roof. On each side of this is a similar gallery, and open wells with wide balconies on every floor. At the extreme west of the western gallery is a wide open staircase of oak enriched with carved posts and panelled balustrades. The whole of the ground, first and second floors, and portions of the basement, third and fourth floors, are allocated to showrooms.

The following firms are principally concerned in the carrying out of this building:—Contractors, Messrs. Higgs & Hill, Ltd.; consulting electrical engineer, Mr. H. E. Keen; chief clerk of works, Mr. A. Turner; engineering clerk of works, Mr. E. J. Ison; head foreman of works, Mr. J. Corfield. Craftsmen and sub-contractors: Messrs. Liberty & Co., Ltd., internal panelling and decoration; L. A. Turner, wood carving; Kruger Gray, heraldic designs; J. L. Emms, ornamental leadwork; Cecil Ern & Co., Ltd., art metal work; Wainwright & Waring, Ltd., steel casements, shop windows, weather vane, &c.; Daneshill Brick & Tile Works, Ltd., ornamental chimney stacks; Dorman, Long & Co., Ltd., steelwork; South Western Stone Co., masonry; F. J. Barnes, Ltd., Portland stone; Mather & Platt, Ltd., sprinkler installation; Leo Sunderland & Co., Ltd., electrical work; Art Pavements & Decorations, Ltd., Biancola partitions; Acme Flooring & Paving Co. (1904), Ltd., parquet flooring; Benham & Sons, Ltd., kitchen fittings; British Challenge Glazing Co., patent skylights; Comyn, Ching & Co., Ltd., ventilators; Castles' Shipbreaking Co., Ltd., old ship timber, oak and teak. Messrs. Dennison, Kett & Co., Ltd., supplied and erected all the interlocking steel lath fireproof shutters, also iron door and collapsible gates; Dent & Hellyer, Ltd., sanitary fittings; Doulton & Co., Ltd., sanitary fittings; Shanks & Co., Ltd., sanitary fittings; G. N. Haden & Son, Ltd., heating and hot water; G. Matthews, Ltd., decorative wall tiling; Ozonair, Ltd., Ozonair ventilation; Davey Paxman & Co., Ltd., boilers; Patent Victoria Stone Co., Ltd., staircases and paving; Albert J. Shingleton, skylight and shop blinds; The Synchronome Co., Ltd., electric clocks; Waygood-Otis, Ltd., lifts; Thomas Faldo & Co., Ltd., asphalte. The whole of the floors and flats in this important building were constructed by the Siegwart Fireproof Floor Co., Ltd., who specialise in a pre-cast floor which requires no centering, and is therefore of great assistance to the general contractors, especially in a building of intricate construction; J. A. King & Co., pavement lights; W. Mallinson & Son, Ltd., wainscot; Le Grand, Sutcliff & Gell, Ltd., artesian wells; Roberts, Adlard & Co., Ltd., tile and stone roofing; Sturtevant Engineering Co., Ltd., vacuum cleaning plant; Associated Fire Alarms, Ltd., fire alarms; S. Lintern, teak sinks; Joseph Kaye & Son, Ltd., ironmongery; Carter & Aynsley, Ltd., ironmongery; Horace W. Cullum & Co., Ltd., cork flooring; Bell's United Asbestos Co., Ltd., Decolite flooring.

LIBRARY

GARDEN FRONT.

INTERIOR: HOUSE IN NORTH WALES. By O. P. Milne & Phipps, Architects.

"British Trade Inquiry."

Mr. Sidney Webb promises us that the trade inquiry shall be "the biggest, most comprehensive and the strongest that could be held." What part does the architect play in the question of British trade? On the face of things, he places a small, neatly printed notice on his office door, "Travellers only seen by appointment." In this way he cuts himself off from at least 75 per cent. of the new ideas that are circulating. It may be a nuisance to interview travellers, but surely some better method—other than their total exclusion—might be adopted. We are sure that if the profession stipulated that the representatives who sought personal interviews were men of technical education, and also men able to give approximate quotations, the various trades would send out such men. But to-day, the industries cannot afford to employ such qualified individuals to spend their time breaking through the preliminary barriers, and the result is that very frequently the architect is faced by an individual who can give no information about the goods he wishes to introduce, and the architect is in consequence annoyed with the interruption. In these difficult times of trade depression, it is, on the other hand, quite reasonable for the community to expect the architect to do his bit for the general good, and not be content to work in a fixed groove. An answer such as the following is not helpful, and certainly not likely to assist towards trade improvement:—"We have our regular and special people to whom we give all our business." That it is more convenient to adopt such measures no one will deny, but they do not inspire special efforts or enterprise. It is much simpler to close your doors against progress and follow the comfortable method, but some day the architect who follows these methods will awaken to the fact that he has no clients, they having realised that he is out of date, and old fashioned. It is more profitable for the architect to read technical papers and advertisements and spare a few hours to interviewing travellers, and possibly occasionally visiting trade and professional exhibitions, than trying to convince his fellow professional that he needs Registration. Why is it that only about 50 per cent. of the members of the R.I.B.A., etc., are interested in the doings of that Institute? And why do less than this number constitute the active electorate? The answer is not difficult to seek. The others are attending to their own affairs in an intensive manner, endeavouring to secure a 100 per cent. efficiency in every branch of their work, seeking to secure clients by force of their own vitality and ability. I know a few architects who insist on receiving and interviewing every traveller that calls at their offices. One of these that I know tells me that he attributes his whole success in life to this fact. His friends tell me that they give him their work because they know that he will give them the very best, at the very lowest price. One special client of my friends, whom I recently met at a public dinner, told me that he was not concerned with the theory of architecture. He desired first-class blocks of flats that would, by virtue of their convenience, sell themselves, and my architect friend supplied the goods.

"People may be very appreciative of good architecture," he continued, "but unless the flats I want to sell express the last word in modern conveniences, all the possible beauties of their elevations will not secure me a purchaser." "How do you think my friend keeps himself so well informed," I asked this speculator or financier. His reply came very promptly. "He pays attention to the little improvements, and instead of collecting press cuttings of the illustrations, he collects all the advertising notices of new things that appeal to him. He tells me that he receives every traveller that calls, and tells them to send their friends who are showing good things." A little later on, in fact, as my architect friend and myself were walking to his club, I asked whether it was true that he received every traveller and kept a cutting file for interesting advertisements. He replied in the affirmative. "But how can you design with such constant interruptions?" "I look upon architecture as a business," he replied, "I have no patience with those who surround their work with a halo of 'Art stuff,' which means in reality inefficiency, blarney and self-comfort. I get heaps of work," he continued, "because clients come to me with their troubles and difficulties. I view them entirely from a business point of view, and I seek to supply their needs with just the right articles. If I were surrounded by an affected artistic atmosphere, they would never approach me with their simple needs; they would go to a local builder, and he, well-meaning, and possibly very painstaking, would mend the fault, but not correct it."

Most architects experiment at the expense of their clients. Water floods the basement, water comes through the roof, rain beating against leaded lights, drips into the rooms—a hundred and one items occur which should not do so. The architect blames somebody else and makes light of the difficulty. The client is obliged to have the matter put right, and therefore pays the additional expenses. The real person to blame is the architect; he has been content to close his doors to progress. He has his regular sub-contractors to whom he gives all his work. They understand his ways. One of them has let him down, perhaps a little too heavily; the client is angry, and the architect's reputation has suffered. It is then that the disillusioned architect looks round for another sub-contractor. Surely it would be far more satisfactory to keep everybody you employ at the top level of efficiency, and not lose a client before you start reading the professional and trade advertisements and interviewing travellers and representatives. Let us look at another side of the architect's life. If anyone were to ask him whether it were better to hold a public architectural competition in connection with any big enterprise, or to ask the President of the R.I.B.A. to appoint an architect, the answer would be in favour of a public competition. And why? Because a competition most likely will produce a better solution. It may even be productive of a totally new set of ideas; it may bring to the front a genius. Under these circumstances and knowing that the majority of the profession would favour a competition, it is perhaps a little difficult to understand why they do not apply their convictions to their own practices to encourage trade enterprise by interviewing travellers and representatives and by giving a number of specialists an opportunity to submit a quotation. The architects are giving themselves increased opportunities for securing the best work. The architect who clings to the easy comfortable methods is not just to himself, his profession, his client, or the general national need. "England expects this day that every man shall do his duty" applies to the year 1924 with more force than it applied when Nelson issued this famous message.

The architectural profession is one of the fountain heads from whence spring efforts which result in enterprise and expansion. It is the same with the civil engineer and many others who make up the thinkers of the nation. And the nation to-day, in these times of trade depression, can justly expect the architects and all those who have it in their power to inspire and encourage industrial activity to leave the comfortable and easy methods, and throw open their contracts for a wider competition, and thus assist to revitalise British trade and activity. Competition forces every man to exert himself and increase his efficiency.

WALLACE R. BEAD.

Colour in Concrete Work.

Messrs. William Bailey & Son, Horseley Fields Works, Wolverhampton, are supplying special colours for concrete; they call attention to the fact that concrete work might be so much more interesting if coloured, and would undoubtedly be more often in use. Building in concrete blocks could be vastly improved if the blocks in question were a good brick red; this can be secured by the aid of metallic oxide colours which are easily mixed in with the concrete on the spot. Where the contract is made, and at quite small cost, the colours are supplied in red, brown, buff, yellow, green, black, grey, blue, slate or purple, and are permanent under practically all conditions, are unaffected by rain, frost or sunshine, and are consequently particularly suitable for tinting asbestos, or cement roofing tiles. The firm specialise in a grass green oxide for colouring hard tennis courts, and are supplying large quantities for countries where no turf is obtainable; the great advantage is that the colour is absolutely permanent under all weather conditions.

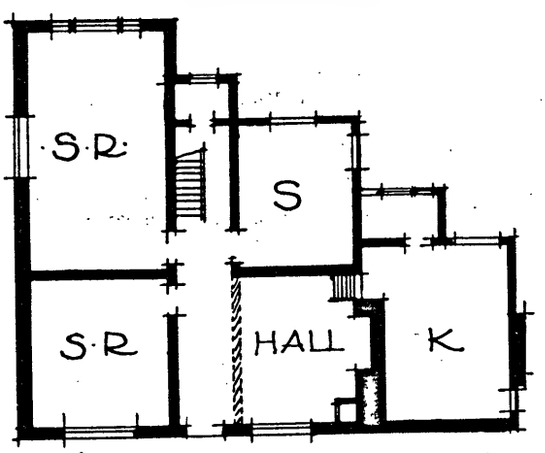
"The Architect" Fifty Years Ago.

JULY 4, 1874.

THE WELLINGTON MONUMENT.

Mr. Goldsmid having, according to custom, called attention to the contracts for the completion of the Wellington Monument, some particulars of the present condition of the work were furnished by Lord Henry Lennox. When his lordship took office as First Commissioner of Works, two side groups remained to be completed as well as the recumbent figure of the Duke of Wellington. Neither of these parts of the work had advanced during the previous two years in any perceptible degree. The recumbent figure is, however, now complete, and is ready for casting. One of the side groups is nearly complete, and is expected to be in the hands of the founder in a few weeks, and the corresponding group is progressing satisfactorily. Mr. Stephens has given up all private works in order to devote himself exclusively to the monument, and Lord Henry Lennox bore testimony to the super-excellence of the quality of the work, and to the disinterested conduct of the artist who might well have supplied something less costly.

· HOUSE · AT · NUTFIELD ·



The illustration shows the hall of the above house after partial restoration. When taken in hand the room on left of the old passage hall was used as a kitchen, and though it had the dubious advantage that a guest could form an idea of the coming " menu " as soon as the front door was opened, the arrangement was, nevertheless, condemned! By increasing the light, and providing suitable cupboards, and with a thermostove and gas cooker as the *batterie de cuisine*, the old and quite unnecessarily abandoned kitchen was brought into re-use and a constant supply of hot water obtained. To enlarge the hall the partition shown erased on plan was removed and in the preliminary stripping was found to be formed of eighteenth century panelling (not apparently in its original position, but belonging to the house) which had been papered over. This led to other investigations, and similar panelling, in good condition, was exposed in the dining-room and one of the bedrooms. The further removal of some beam casing, violently grained as conventional oak, revealed the real oak adze-finished beams showing in the photo. Finally, a small portable range and cupboard containing a sink had to be cleared away, with the result that the original Ingle fireplace was brought to light practically intact. When the later accretions had been demolished, one could see how old cupboard on the right of the fire and doorway on the left had been arranged in simple composition; the pleasing effect of which had been quite lost under the heavy hand of the spoiler. The work was carried out by Messrs. Thomas Crossley, of Bromley, Kent, under the direction of A. J. Healey, Esq., F.R.I.B.A., of 9 Gray's Inn Square, London, W.C.1.

Victory Scholarship Competition, 1924.

The number of entries received this year for the Victory Scholarship amounted to thirty-six altogether. Thirty-three designs were received from competitors sitting at Aberdeen, Bristol, Glasgow, Liverpool and London, on Saturday, June 7, from 10 a.m. to 10 p.m. The programme, which was handed to each competitor upon arrival, consisted of a reception pavilion in an exhibition. The Jury of Assessors, after long and careful deliberation, submitted the following report:—We, the undersigned, being the Jury of Assessors in the Society of Architects' Victory Scholarship Competition, have to-day selected nine drawings bearing the following index numbers for the Final Competition:—153, 159, 161, 166, 172, 173, 176, 177 and 187. Signed: Arthur J. Davis, A. E. Richardson, Howard Robertson, Lionel B. Budden, G. D. Gordon Hake. The authors of these designs were then declared to be as follows:—R. H. Brentnall, of Bristol, 153; A. C. Todd, of Liverpool, 159; A. C. Townsend, of Liverpool, 161; Joseph Addison, of London, 166; A. E. Cameron, of London, 172; Miss A. M. Hargroves, of London, 173; C. H. Short, of London, 176; S. Thomson, of London, 177; G. A. Butling, of Liverpool, 187.

The Final Competition will be held on Saturday, August 9, the Title of the Programme for which will be disclosed to the competitors seven days' beforehand.

The whole of the Esquisses are on exhibition at 28 Bedford Square, W.C.1. from 10 a.m. to 5 p.m. daily until Friday, July 11, inclusive.

The Institution of Civil Engineers.

Tuesday, July 8, at 8.30 p.m., The Thirtieth James Forrest Lecture, entitled " Electrical Progress and its Unsolved Problems," by Professor Elihu Thomson, M.Inst. C.E. Wednesday, July 9, from 8 to 11.30 p.m., Conversazione. Thursday, July 10, at 4.30 p.m., Presentation of the Kelvin Medal, 1923, to Professor Elihu Thomson.

Correspondence

[*The Editor will not be responsible for the opinions expressed by Correspondents.*]

Reflections Caused by Plate Glass.

To the Editor of THE ARCHITECT.

DEAR SIR,—Can any of your readers assist me to solve a lighting problem in connection with a building which I have just altered and converted into a showroom? The showroom measures 37 feet long, from the street windows to the back of the saloon, by 31 feet wide, and is lighted by means of a window 16 feet wide by 9 feet high, glazed with two sheets of polished plate glass; a clerks' office and a private room occupy the back of the premises, and these are lighted from a narrow street overshadowed by high buildings and separated from the saloon by means of a polished mahogany screen filled in with leaded panels of white Flemish glass, while the upper portion of the screen is filled in with wood frames painted white and glazed with sheet glass. Now the saloon is quite well lighted naturally, but the very strong reflections one sees when looking into the windows from the outside prevents one seeing clearly any object in the saloon more than 10 feet from the window glass, and the problem which I wish solved is: How can these reflections be destroyed so that one can see to the back of the saloon from the street windows?

Natural light, unfortunately, cannot be introduced from the back of the building or by means of top cupola lights, and a sunblind over the saloon windows is not desirable, and in any case this would not effect a cure, as I have experimented with a blind and this only cuts away the top portion of the reflections.

If any readers have had a similar experience, I should be glad to have their opinion as to the best method to overcome the trouble.—Yours faithfully,

June 18, 1924. PUZZLED.

"Plays and Playhouses."

To the Editor of THE ARCHITECT.

DEAR SIR,—Methuselah is clearly a dear and forgiving old fellow! I begin to think, since reading his reply to my letter (in regard to his criticism of my Olympia lecture) that he is really quite young after all—perhaps instead of being Methuselah he is Cupid in disguise. In any case he evidently wears wings of forgiveness.

I agree with all he has now written. I did, however, explain the method for financing a Palace of the Arts in my speech.

As to his final dart about our system of education—especially of art education—that is a long story and I could not cram it into that speech—nor perhaps am I the right person to discuss it. Sir Michael Sadler, Mrs. Sargent Florence, Frank Brangwyn, and a few other practising teachers and artists might be asked for their views—certainly to fill a Palace, or art market, adequately, we should need to look into the matter of conditions of production and craft-training. By the way, there is now open at Parsons' in Oxford Street a palace of arts in miniature—a real art market and no commission charged on sales. This is a beginning.—Yours, &c.,

AMELIA DEFRIES.

Brighton Aquarium.

The report of the Panel of Architects, Messrs. Clayton & Black, Messrs. Garrett & Son, Mr. S. Wallis Long and Mr. W. H. Overton, was presented by the Special Committee. The total cost of the scheme is estimated at £120,000. It is the opinion of the sub-committee that in order to convey a clear impression of the scheme a model should be made to scale. The scheme includes a very fine approach consisting of a stone terrace and rock garden. A bandstand, fountain court, entertainment hall about 120 ft. by 90 ft., with a large balcony with dressing room accommodation, are some of the features of the scheme, which also include the provision of refreshment rooms and lock-up shops. The estimated cost includes furnishings and the architects' and surveyors' fees. The sub-committee have gone into the question of finance very carefully, and asked the Council to approve the scheme and instruct the architects to prepare detailed plans and estimates with a view to an application being made to the Ministry of Health under section 67 of the Brighton Corporation Act, 1901.

Mr. Marshall, sen., of the firm of Thomas Marshall & Son, tank and cistern manufacturers of Armley Road, Leeds, is entertaining the whole of the workpeople and staff by a trip to the British Empire Exhibition at Wembley. The party of over 100, will arrive in London at seven o'clock on Saturday morning, and after breakfast, a motor trip round London, on to Wembley for the rest of the day, leaving at midnight for the return to Leeds.

Competition News.

BEXHILL: EXTENSION TO TOWN HALL.

The Competitions Committee desire to call the attention of Members and Licentiates to the fact that the conditions of this competition are not in accordance with the regulations of the R.I.B.A. The Competitions Committee are in negotiation with the promoters in the hope of securing an amendment. In the meantime members and licentiates are advised to take no part in the competition.

The Royal Infirmary Old Site Committee, Manchester, have prepared the following conditions in regard to the competition for the design for a new art gallery and museum. Under the terms of the competition the Corporation have appointed a jury of three assessors to advise the Corporation in all matters connected with the competition and on the relative merits of the designs submitted. The competition is open to all architects of British nationality. The award of the jury will be accepted by the Corporation, and within one month from acceptance the author of the design placed first by the jury is to be paid a sum of £500. The authors of the designs placed second, third and fourth will be paid sums of £300, £200, and £100 respectively. When the Corporation decided to proceed with the scheme, the author of the design placed first is to be employed to carry out the work, unless the jury are satisfied that there is some valid objection, in which case the author of the design placed second is to be employed. The author of the selected design is to be paid, when appointed, in accordance with the scale of professional charges sanctioned by the Royal Institute of British Architects, less the premium already received, which shall merge in the commission. If within twenty-four months of the award the Corporation do not decide to proceed with the scheme, the author of the selected design is to be paid the sum of £1,500, which is to include the premium he has received. If subsequently the Corporation execute the work in accordance with the plans of the author of the selected design, this payment will merge into the commission. There are other conditions which are usual in competitions of this kind, and relate chiefly to the designs, their receipt, exhibition, return, and so forth.

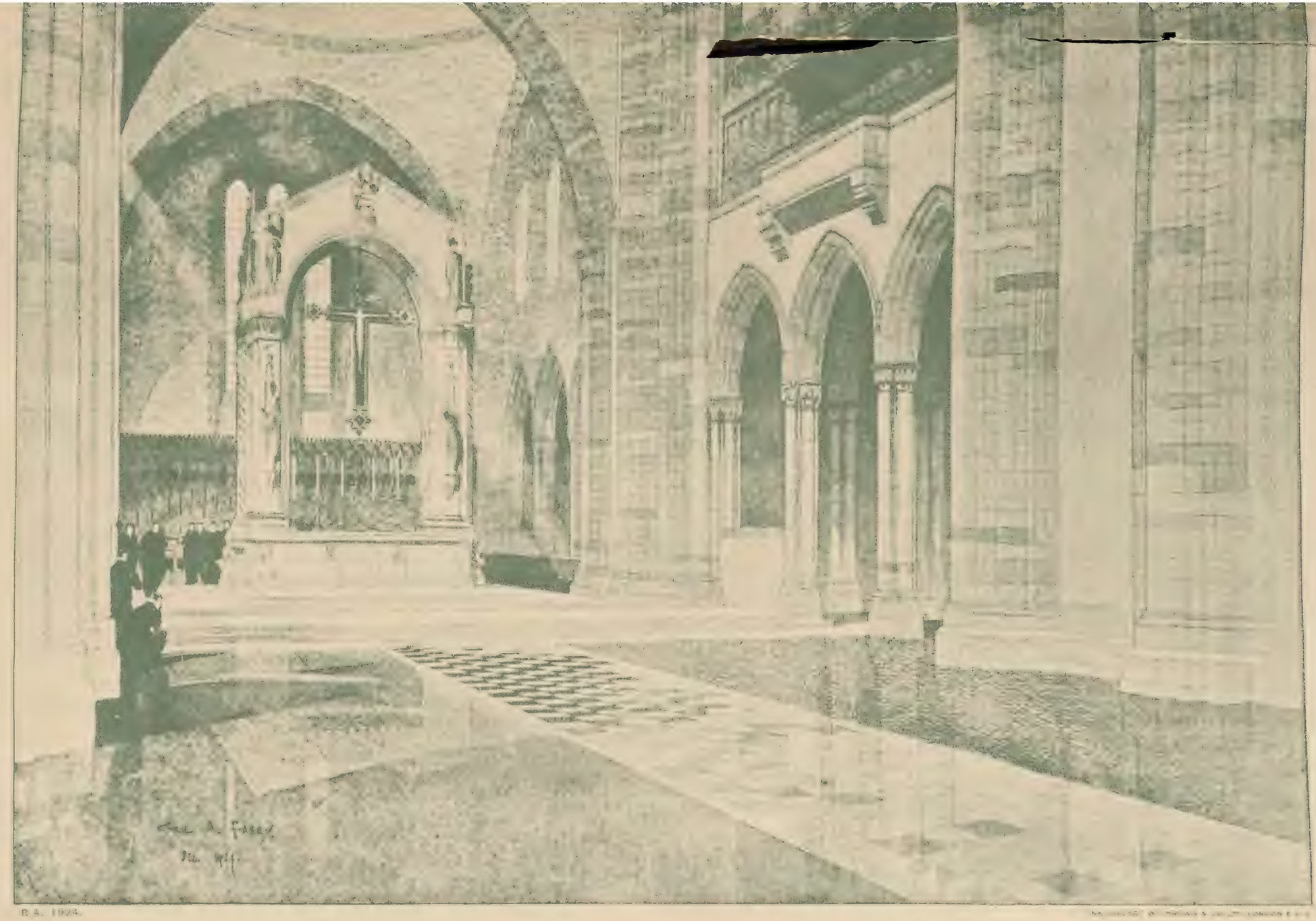
Civic Consciousness.

Civic consciousness implies a regard for one's town, and a concern for its good order and appearance. Where it exists, public buildings and the general accessories of public life will assume an air of urban culture proper to life in great towns. Where it is absent—as in most modern industrial cities—the outward character of the community will be that of neglect and disorder, which may be far from representing the actual individual character of its members.

For the best part of a century communities abroad have shown more civic activity than has been exhibited in this country, for reasons which are fairly obvious; nor is it difficult to see that our mood is now changing towards wider interests, many of which depend upon corporate action, and so foster civic consciousness.

This return to urbanity on our part (we were not always deficient in the expression of public spirit) is parallel with the adoption by other countries of the best fruits of our individualism. The better sort of English home—for instance—whether cottage or mansion, has been easily the most appropriate and satisfying architecture in that phase of community life in the world; and to-day the world accepts our ideals of the individual home, and the exclusively residential road, as preferable in most cases to tenement buildings and roads for all purposes.

The tendency of town planning in all countries is to take what is best in the individual contribution of other nations and to engraft it upon local practice, with such adjustments as local conditions may render necessary. The quality in town life abroad of which we stand most in need is that of urbanity; which not only adds to the pleasures of existence, but is considered a commercial asset in Germany and America. Dirt, grime, and sordid conditions are no longer thought to be a necessary part of industrial efficiency; on the contrary—as the modern welfare movement shows in individual cases—efficiency is found to be at a maximum in pleasant places; which sufficiently explains why commerce in America is the chief force behind civic consciousness, and why we should profit by following their example.



R.A. 1924.

NEW CHURCH. AMPLEFORTH ABBEY. YORKS.

G. GILBERT SCOTT, R.A. ARCHITECT

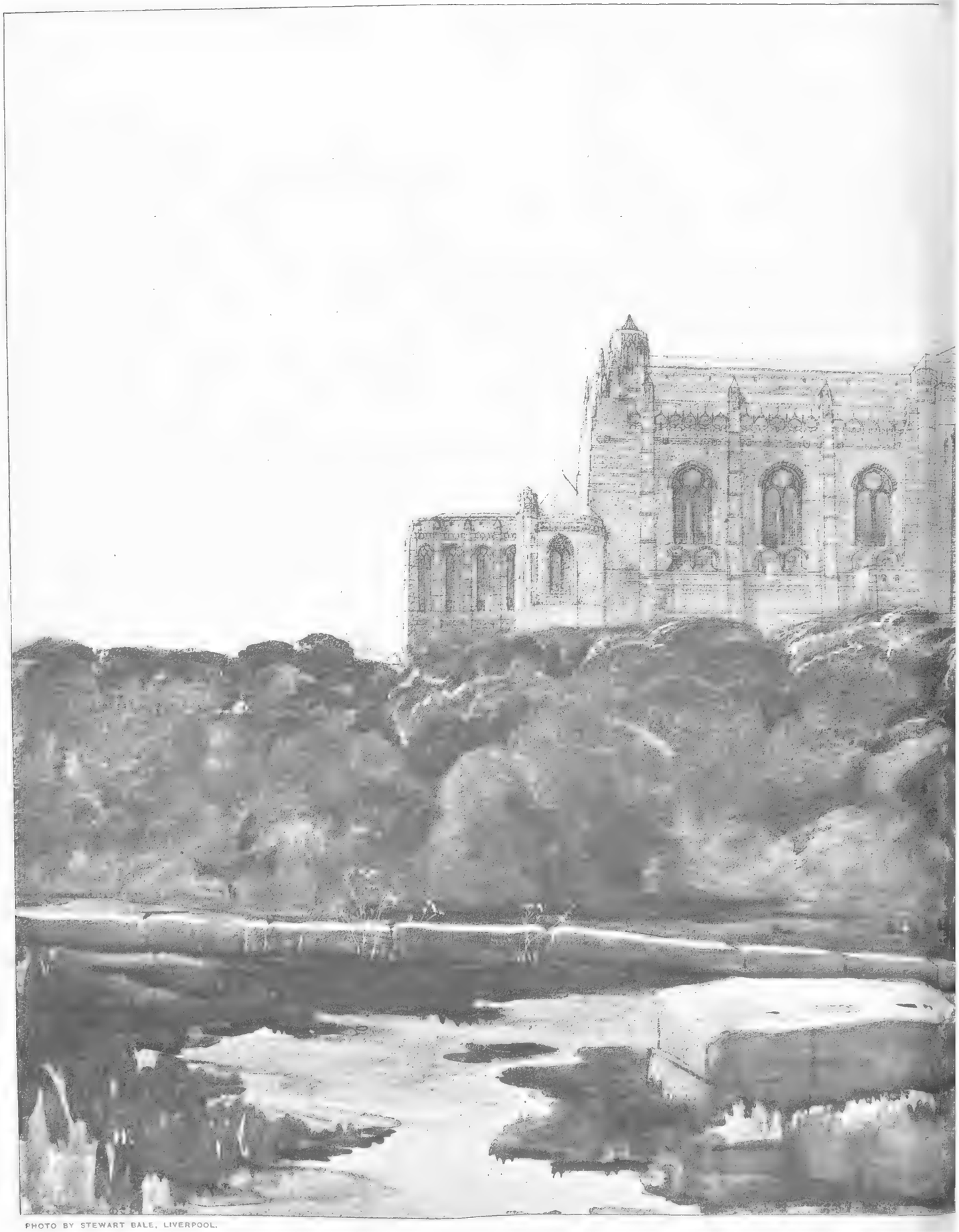
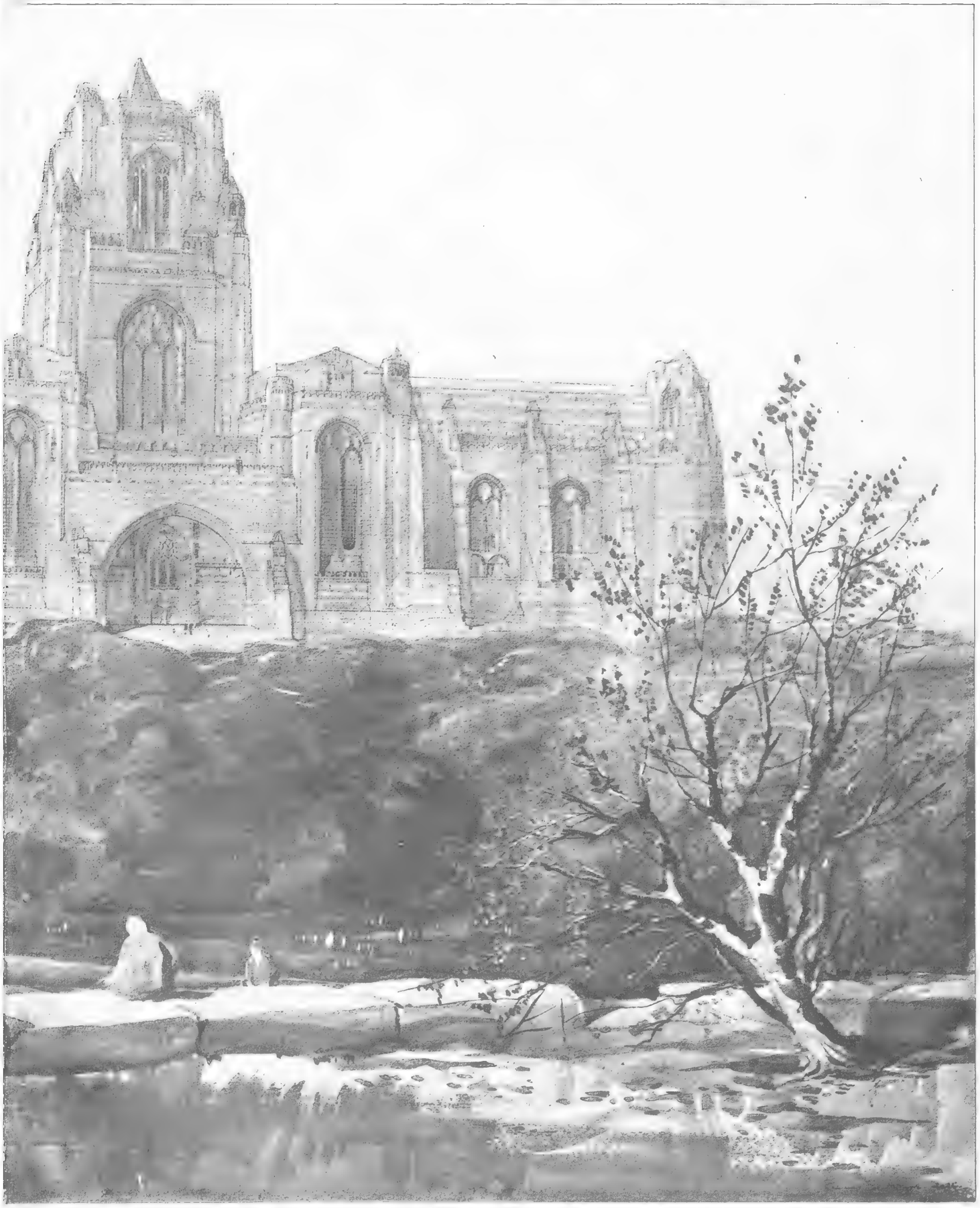


PHOTO BY STEWART BALE, LIVERPOOL.

PERSPECTIVE DRAWING OF TH

G. GILBERT S



"INK-PHOTO" WM BROWN & CO. LTD. LONDON, E.C.3.

OMPLETED LIVERPOOL CATHEDRAL.

TT, R.A., ARCHITECT.

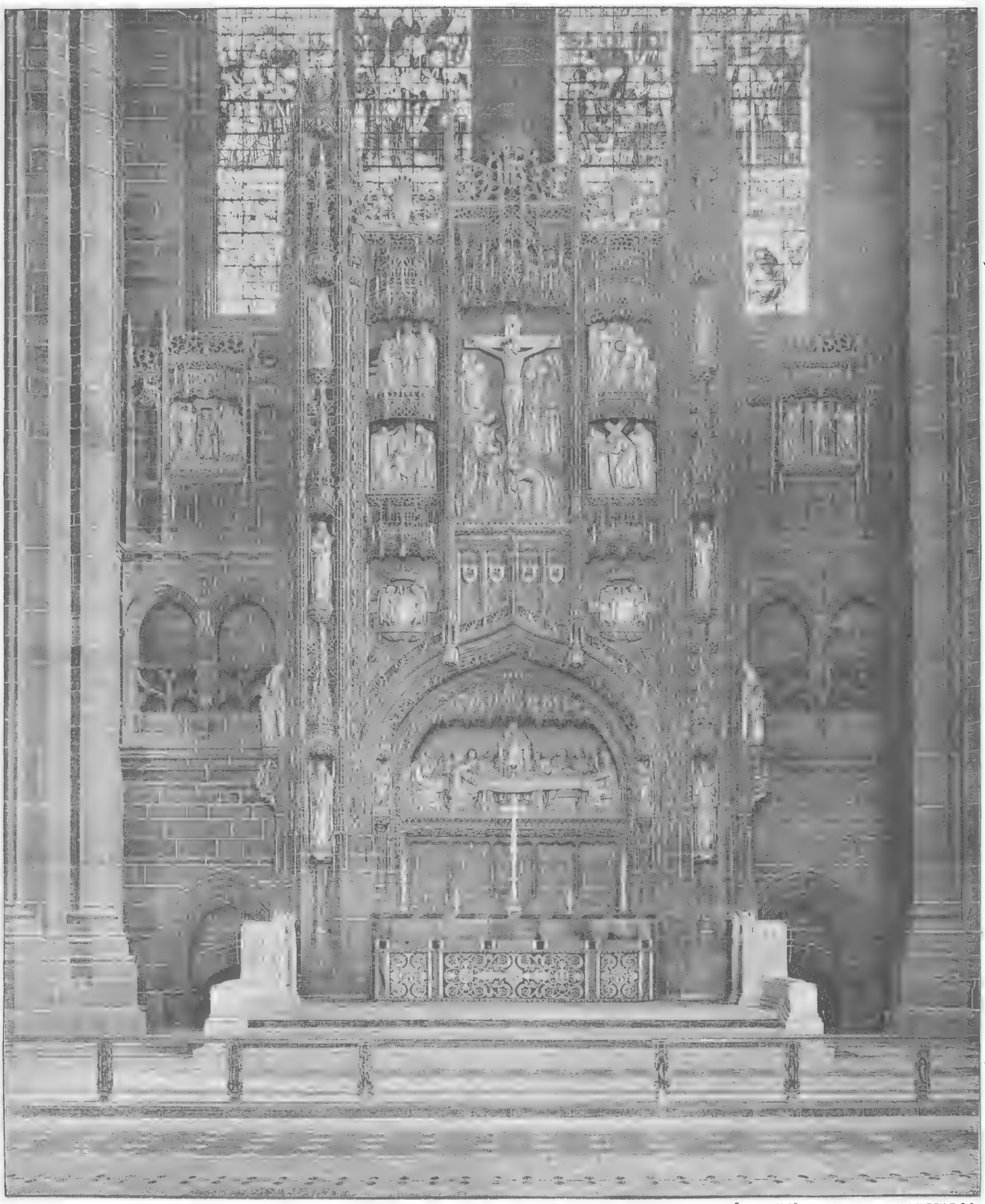


PHOTO BY STEWART BAI ·, LIVERPOOL.

"INK-PHOTO" WM BROWN & CO. LTD. LONDON, E.C.3.

LIVERPOOL CATHEDRAL, THE REREDOS.

G. GILBERT SCOTT, R.A., ARCHITECT.

PHOTO BY STEWART SALE, LIVERPOOL.

"INK-PHOTO" WM BROWN & CO. LTD. LONDON, E.C.3.

LIVERPOOL CATHEDRAL. THE BISHOP'S THRONE.

G. GILBERT SCOTT, R.A., ARCHITECT.

OPEN AIR SWIMMING BATH AND OLD BOYS' CLUB ROOM, ALLHALLOWS' SCHOOL, HONITON, DEVON.
FRANK E. WHITING and WALTER E. PETO, Architects.

The Real Difficulty.

We have read a great deal about our national housing difficulties. Schemes follow schemes, but everyone seems to desire to avoid the fundamental difficulty which rests on very solid foundations.

Until this difficulty is met face to face and schemes designed which pay due regard to this difficulty, we are likely to go on from one failure to another.

You cannot change the whole structure that has built up our present civilisation. You cannot make human beings mentally equal, and so long as human beings differ in their outlook on life so long will it be impossible to find accommodation for everyone on an equally comfortable basis. Not even the most beautiful Socialism can force men and women to each contribute towards the maintenance of the pleasures they enjoy. We all know that the human race is made up from a great number of different characters, but these can be reduced to two classifications—the worker and the slacker. The one who works because he realises his responsibilities and is uplifted by the progress he and his children make. And the other who does not wish to work, and sees no use in working; who realises that our present civilisation will not look on whilst he starves. When those who desire to solve the housing problem face these two fundamental conditions, we shall make some tangible progress.

To provide housing accommodation for the slacker at the expense of the worker is not a fair proposition, and whilst it may be attempted for a period of time it is bound to fail in the long run.

When free education came into force, a great work was accomplished, and much was done towards giving everybody a chance in life. If you seek to reward those who produce nothing, just because their condition and suffering is unpleasant to behold, you will steadily undermine the whole structure of civilisation.

Those who work and save are entitled to better housing accommodation than those who are slackers. It is impossible to argue that they have never had a chance, because in most cases it is not true, they have had the chance, and their natural indolence has let it pass. In any case all children are given equal opportunities to learn. If it were possible to house everybody in the land in nice comfortable conditions, after a period of time we should be back to our present state. There exist some people who cannot be clean, and careful and contented, and contribute their share of work, and these people must suffer so that some day they or their children will realise that work is man's greatest blessing, and brings in its train improved conditions.

To live comfortable and to put something by is the natural desire of all men from the highest to the lowest. It is only a question of degree; and housing accommodation ought to be supplied on the same degree basis. Houses should be designed which supply a minimum standard of comfort and accommodation; but their design should not be of a nature as likely to satisfy the ambition of the lowliest. Housing accommodations should be designed so as to awaken a keen desire in the heart of every man to improve his lot. The nation must be full of vitality, which is the outcome of a keen ambition for self-improvement.

Welsh Housing Development Association.

"The Countryside and Rural Advertising." By H. M. Vaughan, M.A., F.S.A.

"God made the country and man made the town"—in other words, when we quit the town we ought to find ourselves in close touch with Nature and with Nature's God. And, broadly speaking, this was actually the case until some 30 years ago. But with the opening of the present century a most alarming change has come swiftly over the scene. The fact is, that with the continuous growth of population and industrialism, and still more owing to the rapid increase in motor traffic (which has quite altered the character of our roads) the natural beauty of the countryside has now become an exploitable asset and is itself in real danger of gradual extinction. That odious expression "beauty spot," constantly seen in print, has too often proved an invitation or excuse to convert a thing of natural charm into a thing of artificial ugliness. Given a point of vantage with some view, a waterfall, a ruined castle, a wooded dingle; and given an advertisement drawing attention thereto, and at once the place in question offers an excellent opportunity for "development," which is merely an euphemism for its ultimate destruction. In this way then, if we proceed to a logical conclusion, every piece of fine natural scenery in the Principality is one by one doomed to disappear."

The above is taken from the 1924 Year Book of the Welsh Housing and Development Association. And whilst we quite understand to what the author refers, we feel that the day of the vandal is past. The general public and its opinion is too strong to tolerate the destruction of places of beauty. True we cannot prevent architects and builders of little taste from spoiling the prospect with the erection of ugly houses. Though we hope the registered architect of the future will not only have passed an examination proving his knowledge of architecture, but also bearing evidence of his artistic taste, and thus reducing to a minimum the chances of beautiful places being destroyed by ugly buildings.

WARRINGTON.—Old buildings south-east of Warrington Bridge are to be demolished so that the site may be used for the proposed war memorial.—The Town Council are considering the laying out of the site of the Old Bridge Inn.—The Borough Surveyor has prepared plans showing the course of the proposed road from Manchester Road to the river Mersey at Howley.—Plans passed for three houses, Orlard Avenue, for Messrs. W. & A. Ashton.—The Fire Brigade Committee suggest that three houses should be erected on a site in Cambria Place.

Book Reviews.

"Wembley in Colour." By Donald Maxwell. Messrs. Longmans, Green. 21s. net.

Donald Maxwell is a most versatile artist, and as I wrote about Mr. Sidney H. Simes, he, too, fulfils the conditions to the title of artist in a very adequate manner, for Donald Maxwell also possesses great creative ability. Whilst Wembley offers to the artist who possesses a vivid imagination many delightful pictures, to the mere draughtsman, clever though he may be in rendering truth, Wembley is a bewildering mass of contradictions. Donald Maxwell possesses this imagination and hence he has given in this book impressions of the Exhibition as many would wish to remember the same. I well know the disappointment that met me when I entered the Gold Coast and West African enclosure. All the promise of the romantic exterior was dispelled by the barren interior. No native life was to be seen as I so sincerely hoped would be shown. But the sketchy pictures on page 14 and the preceding pages will enable all those who never had the unfortunate opportunity of being disillusioned to fancy and picture in their minds the native wonders that should have been on view. "A Glimpse of Nigeria" and "The Courts of the Gold Coast," the first two full-page colour plates after the frontispiece, depict just everything that illustrates an artist's rendering of a scene which in reality is very different. But both please me very much indeed, and I am glad that this book has been conceived and so successfully produced. I do not desire to have horrid reality always thrown at me by means of the wonderful camera and the illustrated Press editors, whose love for truth and facts at times is very wearying. "The Courts of the Gold Coast" is perhaps one of the best illustrations. "West Africa in Middlesex." This small sketch continues the make-believe. The public were on the occasion of my visit allowed to peer through the cracks in a wooden fence which was also guarded, so that whilst Mr. Maxwell possibly—as one of the favoured—gained admission, all have not been so fortunate. "In a West African Village," on page 21. This is very possibly a correct representation of the real place and it makes a charming picture, but Wembley to my mind will not supply its counterpart. "A Moonlight Fantasy of East Africa." In this sketch Mr. Maxwell shows some of his real ability. To those who examine this illustation closely will be revealed the great simplicity of the technique which the artist employs, and yet the whole effect is undoubtedly of considerable merit. "The South African Pavilion," an illustration in colour facing page 28. It is undoubtedly clever, but I cannot visualise the real building from this sketch. All the characteristic features of the structure have been included by the artist, but————! On the next page a pencil sketch is included—"In the Wine Country of South Africa." I can only repeat that Mr. Maxwell is an artist and he has rendered in his book views of the Exhibition as they ought to be in reality. Facing page 44 there is a picture "Canada over the Water," a truly fine sketch. We hope many of the visitors will have an opportunity of seeing the afterglow of the sunset shedding these charming colour effects on this building. I do not think the English climate will ever come up to reproducing the colouring of Mr. Maxwell's "British Guiana," facing page 48.

"A Gate of India" rather disappoints me. I feel that the distant building should have been white, not yellow at times merging into pink. Whereas "Sunny Ceylon" is full of charm, facing page 64. The artist gives again one of his best in "A Nocturne of India": his command of the colour blue is truly wonderful. I have seen a great deal of his work for "The Graphic," and the beautiful shades of purple-blue merging into blue-greens and clear blues of different shades are at times little short of wonderful. But to form a clear judgment of these facts his work should be seen in the original, though "A Nocturne of India" is a very good reproduction indeed. "An Evening in Burma" and "Hong-Kong" do not please; they both border on the crude side, and I should feel inclined to say that the reproductory block-makers and printers have more than likely been given very little time with these two subjects. So many of the illustrations are really good, quite apart from the possibly superior quality of their originals, that I find it difficult to reconcile myself to these last mentioned views. Facing page 76 we have "Malaya." This building has always presented to myself a very difficult problem, and I compliment Mr. Maxwell on this impression. All the tones that offend me in the building have been gracefully modified, and the whole picture is full of dignity.

Facing page 84, "Australia" is the title of the illustration. Here, again, we have an example of the Maxwell blues and greens. Having drawn very liberally on his imagination, I should have preferred the right hand tree out of the picture. Facing page 88, the New Zealand Pavilion is shown, and Mr. Maxwell has treated this building kindly. We rather regret the introduction of the whites. "Wembley by Day" and "Wembley by Night," are both pictures full of happy thoughts; both are pleasing and both are rather untruthful, but what does this matter?

Taking the book as a whole, I fancy Mr. Maxwell is not greatly attracted by architecture for its own sake, but only when it will supply him with picturesque details and opportunities for exercising his wonderful colouring talents. As a complete review of the Exhibition I can give the volume the highest commendation; it will very possibly be the best illustrated book on the Exhibition—it certainly occupies this position to date.

H. W. M. K.

"Children's Encyclopædia." The Amalgamated Press, Ltd. Fortnightly, 1s. 3d. net.

We have before us the "Children's Encyclopædia," and we feel that the efforts that the promoters of this publication are making to increase the interest in Architecture in the minds of the young are worthy of some comment and appreciation by the professional Press. Part 44, under the sub-title of "The Buildings of the Old World," on page 5375, includes illustrations of the reconstruction of the group of palaces at Persepolis, one showing the general scheme, the other a view of the hall of a hundred columns. On page 5381 a picture illustrates the central columns of the Hypostyle Hall at Karnak as they probably appeared in the days of the Pharaohs. Pages 5382–5388 include a truly wonderful collection of views, illustrating examples of Egyptian and Greek architecture, amongst which "The Great Temple of Luxor," "The Double Pylon of the Temple of Isis at Philæ," "The Great Pylon at the end of the Avenue of Sphinxes at Karnak," "Reconstructed Court of the Temple of Ammon at Karnak," "The Great Pylon of the Temple of Edfu," "The Tomb or Treasury of Atreus at Mycenæ in Greece," appear to us to be some of the best, though it is very difficult to make any selection from twenty-seven very interesting pictures reproduced in connection with this chapter, which is the first to deal directly with the subject of Architecture in this publication. The text includes a short description of the illustrations, each group being dealt with in paragraph form.

The subject is approached with every respect, as will be realised by the following opening sentences: "And now we turn to another kind of inspired work, Architecture. At once we know that here is something more than art, though art is near the root of its workings. The Architecture of the world has been created by religion and the need of temples and churches; by tribal life, ruled over by kings, and the need for palaces; by the growth of organised society, and the need of public speaking places; by the development of domestic life, and the need of homes. Under one or other of these headings most of the great buildings of the world can be grouped." Referring to statuary and its limitations, the author states that "No such limitations apply to the art of building; a temple, a hall or palace may be in any style, in any form. Architecture varies from one continent to another. It is affected by soil and climate, by the sun's dominance, by the material at hand, and above all by the shape of thought, as one might say, of the people producing it, their religion, their beauty instinct, and the work of those who have gone before." In this way and by many expressions of appreciation for the great art of Architecture is this subject introduced in this publication to the children of this generation.

"The Acropolis of Athens." By M. Schede. Translated from the original in German by H. T. Price. B. H. Blackwell, Ltd., 50-51 Broad Street, Oxford. 11s. 6d. net.

Those interested in classic archæology will value this book and appreciate the simple manner in which the translator has rendered his work. The illustrations from photographs are quite good, and 105 in number. Some pen and ink sketches are included in the text with plans.

"Alfredo Melani L'Arte di Distinguere. Gli Stili Architecture, Sculpture and Applied Arts." Second edition, with 262 illustrations. Published by Ulrico Hoepli, publisher of Milan, Italy.

This volume is in a very neat form, measuring 6 by 4½ by 1 inches. The author, Alfredo Melani, has on many occasions contributed to THE ARCHITECT, and judging from the very careful method in which his contributions have been written, we feel sure that this little volume will find many friends.

General News.

ANNFIELD PLAIN.—The Urban District Council have passed plans:—House at South Medomsley, for Mr. Jacob Soulsby; alterations to six houses at Langley View, for the South Moor Colliery Company, Ltd. The Council have passed plans and specifications of the undermentioned houses and certificates of qualification of subsidy of £75 each:—Twenty-six houses on the Carrmyers estate for the South Derwent Colliery Company.

BARKING TOWN.—The Urban District Council have arranged with the Ministry of Transport that preference shall be given to local labour in connection with the erection of a bridge across Barking Creek.—A site on the Upney Estate, which is being planned for development, has been scheduled for the erection of an elementary school.—The surveyor has communicated with various persons in respect to the disposal of the timbers of the Old Town Hall, and in this matter the General Purposes Committee recommend the Council to agree to the principle of providing a site in the district in the event of Mr. Fanshawe agreeing to re-erect the Town Hall.—The Ministry of Health has sanctioned the Town Quay extension scheme, to cost £3,792. Plans passed:—Celluloid store at West Bank, for the River Roden Co.; re-building the "Volunteer," B.H., in Abbey Road, for Messrs. Charrington & Co.

BARNES.—The Surrey Education Committee have forwarded to the Urban Council sketch plans for the proposed secondary school for boys atBarnes.

BATTERSEA.—The Ministry of Health have for the time being refused to sanction a scheme for the extension of the Central Reference Library at a cost of £11,187.—The Borough Council propose the extension of the Plough Road Baths if the necessary land can be secured.—The Borough Council has agreed to plans for four houses in Upper Tooting Park for Messrs. W. & E. Hill; additions to Boys' Club, Orville Road, for Messrs. W. Lawrence & Son, Ltd., and additions to Bolingbroke Hospital for Messrs. Young & Hall.—The Town Hall lavatory accommodation is to be increased at an estimated cost of £582.—The Council propose the acceptance of the tenders of the Climax Furnace Co., Ltd., £350, for furnace and plant at Nine Elms Baths, and of the North Finchley Waterproofing Co., £93, for sailcloth for the Town Hall dancing floor.

BERMONDSEY.—The Borough Council are to proceed with the erection of cottages on the Rotherhithe Street housing estate.

BEXHILL TOWN COUNCIL.—Plans passed: House, De La Warr Parade (Mr. J. E. Maynard); house, Collington Rise (Mr. J. E. Maynard); bathing chalets, West Parade (Mr. J. E. Maynard); bungalow (amended plan), off Peartree Lane (Mr. C. T. Armstrong); house, Westville Road (Mr. C. W. Freeman); house, Cranston Avenue (Mr. C. W. Freeman); house and garage, Clavering Walk (Mr. E. H. Gandy); bungalow, Mayo Lane (Messrs. Stevens & Sons); pair of semi-detached houses, Magdalen Road (Mr. G. H. Gray); two houses, De La Warr Road (Mr. G. H. Gray); house (amended plan), Knebworth Road (Mr. D. B. Sceats); house, De La Warr Road (Messrs. Ching & Co.); two flats and maisonettes (amended plan), West Parade (Mr. T. L. McCormick); shop front at No. 50 Western Road (Messrs. Stevens & Sons); shop front at No. 24 Western Road (Messrs. Cohen & Cohen); alterations to No. 8 St. Leonards Road (amended plan) (Messrs. Wall, Callow & Callow); bungalow, Peartree Lane (Mr. E. H. Bray); alterations to the New Club (Messrs. Tubbs & Messer).

BIRKENHEAD.—The Corporation have had a report from a Special Committee with reference to the utilisation of the Williamson bequests and the erection of a new art gallery.

BOLTON.—Revised plans are to be prepared by the Education Committee for a new school in Devonshire Road.—The Board of Education have urged the remodelling of the St. Peter and St. Paul's School, girls' department.—Tenders are to be obtained for re-flooring the Emmanuel School.—Plans approved by Town Council: Plant house, Grecian Mills, for Messrs. Thos. Taylor & Sons, Ltd.; six houses, Higher Swan Lane, for Mr. A. Bardsley; streets and levels, Bromwich Street, for Earl of Bradford; band pavilion, Queen's Park, for the Parks Committee; two houses, Greenland Road, for Mr. James Latham; house, Lostock Junction Lane, for Mr. W. Higson; house, Lever Edge Lane, for Mr. Thos. Beakley; extension to mill, Deane Road, for Messrs. Maude & Co., Ltd.; offices, Delphi Hill Mill, for Messrs. Wm. Heaton & Sons, Ltd.; new shops, Holliwell Road, for Great and Little Bolton Co-operative Society, Ltd.; club house, Back Wigan Lane, for Deane Conservative Club. Plans disapproved: eight houses, Easedall Road, for Mr. A. S. Woods; two houses, St. Michael's Avenue, for Messrs. E. & S. Street; six houses, Harpers Lane, for Mr. W. W. Pickup.—A scheme is to be prepared by the borough surveyor for the extension of the Hacken Sewage Works on the activated sludge process.

CALSTOCK.—A scheme for the widening of Calstock New Bridge is under consideration by the County authorities of Devon and Cornwall.

COLYTON.—A site is recommended by the Devon County Council for the erection of a new secondary school.

CROYDON.—The Corporation are purchasing land in Lower Addiscombe Road for public baths.—Alterations and additions are proposed at the Cheam Sanatorium at a cost of £6,876.—Courtyards at the hospital are to be relaid in concrete *in situ* at a cost of £2,595.—Plans passed:—Croydon Corporation, sub-station, Wickham Road; T. W. Clayton, 98 Warwick Road, one house, 96 Warwick Road; C. Lewin, 9 Cherry Orchard Road, bungalow, Bisenden Road; B. C. E. Bayley, 108 Beverstone Road, one house, Pollards Hill South; Croydon Corporation, sub-station, Violet Lane; F. Windsor, 56 High Street, motor and lorry depot, Thornton Road; Clout & Tysoe, London Road, amended site, plan of twelve houses and garages, Galpins Road; Chart, Son & Reading, Union Bank Chambers, classroom addition, Sydenham Road North, Holiness Hall; W. Cook, 50 Gracechurch Street, E.C., two houses, Ryecroft Road; F. C. Powell, 97 Northcote Road, two houses, Albert Road; C. S. Banks, 16 Oakfield Road, house, Addiscombe Road; T. S. Town, 62 Melrose Avenue, Manor Way; S. H. Laver, Norbury, ten houses, Norbury Avenue; H. A. Treble, 8 Sunbridge Road, one house, Addiscombe Road; W. M. A. Head, 200 Lower Addiscombe Road, house, Gainsborough Road; A. J. Stannah, 37 Bingham Road, two bungalows, 40 Ashburton Road; Young & Macintosh, 1 Imperial Buildings, one house and garage, Addiscombe Road; R. W. Carter, 197 Northwood Road, three houses, Ingram Road; S. A. Martin, 155 Lower Addiscombe Road, one house and garage, Addiscombe Road; Electricity Works, sub-station, Bensham Lane; W. Smith & Sons, 202 London Road, bungalow, Dunheved Road; L. O. Linfoot, Haling Grove, one house, Pampisford Road; G. Poulton & Son, 11 Westbrook Road, twelve houses, Shirley Road and Shirley Church Road; L. White, 34 Braemar Avenue, bungalow, Ham Farm; P. Richardson, 384 Lower Addiscombe Road, five houses, Morland Road; W. G. Bouttell, 137 Ladywell Road, Lewisham, bungalow, Ham Farm; F. Knight, 147 Beulah Hill, workshops and showrooms, 147 and 149 Beulah Hill; F. T. Wooding & Sons, 178 Mitcham Lane, one house, Queenswood Avenue.

DEVONPORT.—A proposal has been submitted to the Devon County Council by the Devonport Mercantile Association for the construction of a bridge across the river Tamar from Devonport to Torpoint, at an estimated cost of £450,000. The County Council have asked their southern divisional committee to consider and report as to the proposal.

DUDLEY.—The Town Council propose to invite fresh tenders for the erection of 52 houses on the Woodside site.—A successor to the late Mr. Bernard Robson, deputy housing director, is to be advertised for at a salary of £350 a year. Plans passed: House, Ednam Road, for Miss L. Stainton; new shop front and structural alterations, Hall Street, for Melias, Ltd.; alterations and additions, new cottage, Spring public house, Church Street, for Mr. Chas. Worby.

EALING.—The Middlesex County Council are borrowing £20,930 for the erection of a secondary school for girls. The contractor is Mr. Monk, and it is now proposed that he shall also erect a hall at a cost of £2,860.

EPSOM.—The Rural District Council are to widen Croydon Lane, Banstead, at a cost of £8,762. The Urban District Council have asked the County Education Committee to provide a secondary school for boys. Plans have been prepared for a new infants' school.

FINCHLEY.—The Urban District Council recommend the widening of the road from Regent's Park Road to Manor House, at a cost of £5,867.—An improvement at Tally Ho! Corner is to be carried out at a cost of £16,000.—A footpath diversion is proposed on the Oakleigh Park Estate, which is to be developed by Messrs. Tuckett, Webster & Co.—Surface water sewers are to be laid in East End Road at a cost of £5,275. The tender of Messrs. Shearman Bros., of Cambridge, £20,113, is recommended for sewer construction in Totteridge Lane.—Plans recommended:—House, Meadway, Mr. W. Gibson; house, Northway, Mrs. A. Norton; two houses, Christchurch Avenue, Messrs. McCann and Dixon; two houses, Brookland Hill, Garsubil, Ltd.; sewers, Hampstead Garden Suburb, Co-Partnership Tenants, Ltd.; garage, laundry and tool house, 2 Ravensdale Avenue, Mr. William Ramsay; thirteen houses, Great North Road and Sylvester Road, West Streatham Building Co., Ltd.; proposed new road, Oakleigh Park Estate, Messrs. Tuckett, Webster & Co.; extension of surface water sewer, Brookland Hill, Co-Partnership Tenants, Ltd.; seven houses, Rosemary Avenue, West Streatham Building Co., Ltd.; house, Stanhope Avenue, Mr. J. H. S. Chevallier; three houses, Grosvenor Road, Mr. J. J. Rainbird; eight houses, Hervey Close, Mr. F. W. Bristow; four houses, Moss Hall Grove, Messrs. Barrett & Co.; alterations, "Westholme" and "Parkdene," Cavendish Avenue,

The London Property Exchange; three lock-up shops, 29, 30 and 31 Cornwall Parade, Messrs. C. F. Day, Ltd.

FRIMLEY.—The Urban District Council are asking the Surrey County Council to provide a secondary school in the district.

HASLEMERE.—Plans for a new police station have been approved by the Standing Joint Committee and now await approval of the Prison Commissioners.

HESSLE.—The East Riding County Council are to erect an elementary school for 400 children.

HOXTON.—The L.C.C. are to proceed with the erection of dwellings comprising 39 tenements on the Whitmore clearance area. The buildings will cost about £20,000.

HULL.—The Corporation propose a Bill to enable the contruction of a new pier and landing stage at an estimated cost of £200,000. This estimate covers the Fixed Pier with Overhead Promenade, including all approaches; the Floating Landing Stage; Hinged Bridge and Vehicle Lifts; the Fixed Bridge required by Sir John Nicholson; bringing out the piling at "Sammy's Point"; dredging; and certain contingent works.—The Education Committee are seeking a site in East Hull for a new secondary school.—The Housing Committee has accepted the tender of Mr. F. Bilton for the erection of 200 houses on the East Hull site as follows:—17 blocks of 6 dwellings at £2,622 per block; 18 blocks of 4 dwellings at £1,780 per block; 13 blocks of 2 dwellings at £906 per block; making a total of £88,392.—The City Engineer has prepared a report on the widening of Regent Street and the contruction of a new street in connection therewith at a cost of £77,200.

ILFORD.—The Urban District Council are considering the extension of South Park and the Barkingside recreation ground. Plans passed:—W. D. Key, shops and offices in Cranbrook Road; Smee & Houchin, additions to Presbyterian Church, Goodmayes Road; Harber & Cox, 6 houses, Lynford Road; R. Stroud, 11 houses, Farnham Road; W. H. Knox, four houses, Levett Gardens; Mr. G. H. Nash, bungalow, New North Road. Plans submitted by Messrs. Gunton for Sunday School, Wesleyan Church, The Drive, have been disapproved.—The Council's town planning scheme for the urban district has been lodged with the Minister of Health.—The £9,760 scheme for a Central Library has been vetoed by the Minister of Health, who suggests postponement for the time, so that labour shall not be taken from housing.—The Council suggest a loan of £100,000 for advances under the Small Dwellings Acquisition Act.—The Electricity Committee recommend the tender, £2,149, of Messrs. Hammond & Miles, Ltd., for office accommodation.

ILKESTON.—At the Corporation Works Committee, Mr. Sidney F. James, town clerk, reported upon the question of penalties in respect of the Northern housing scheme, and stated that he had, with the consent of the Ministry of Health, arranged to settle the matter by compromise on the terms that a penalty of £1,000 be enforced against the builder. The settlement was confirmed.—The Bulland Recreation Ground is to be laid out at a cost of £6,500.—Plans passed: Cottage, Queen's Avenue, Mr. A. J. Tomlinson; house, Park Drive, Mr. J. H. O'Connor; house, Longfield Lane, Miss K. Booth; house, Longfield Lane, Mr. J. Cooper.—The Council are conferring with Heanor Council regarding the provision of a joint hospital.

KENSINGTON.—Application is being made to vary the terms of the leases so that 44 Onslow Gardens and 2 Cornwall Mansions can be converted into flats.—A church is to be erected on the site of 5 Pembroke Villas.—Bank premises at 15-16 Leonard Place are to be rebuilt.—The Borough Council agree to the construction of vaults in accordance with an application by Mr. H. Austin Hall, F.R.I.B.A., on behalf of the Gas Light and Coke Co., Ltd., who are erecting a new building in Church Street.

KINGSBURY.—The offices of the Aircraft Manufacturing Co., The Hyde, Kingsbury, are being purchased by the Middlesex County Council for secondary school purposes at a cost of £15,275.

LEWISHAM.—A site has been selected on the Downing housing estate for the erection of an elementary school for 768 children and a central school for 400. The L.C.C. propose the erection of an elementary school for 400 on a site in Sprules Road.—It is proposed to stop up a footpath on the Manwood Road estate to facilitate its development for building.—The Borough Council have agreed to the following plans: Mr. T. A. Boughton, 32 houses, Penberth Road; Messrs. C. Cutler & Sons, factory and house, Hither Green Lane; Mr. P. B. Daunatt, 10 houses, Cranston and Croxted Roads; Mr. A. J. Glock, four houses, Manwood Road; Messrs. C. Engram & Co., 20 houses, Como Road; Mr. F. T. Bush, house, Love Lane.

LITTLE WOODCOTE.—The Surrey County Council have agreed to lease land to the local British Legion for the erection of a club house.

LONDON.—The Metropolitan Water Board report that the twelve new cottages at Littleton built by the Board in substitution for similar property acquired and subsequently demolished in connection with the construction of the Littleton reservoir have been sold by auction, and realised the sum of £2,050.—For laying section 2 of the main from Kempton to Cricklewood the Works Committee recommend the tender of Sir W. G. Armstrong, Whitworth & Co., Ltd., £67,999 13s. 6d., who recently secured the contract for No. 1 section.

LUTON.—A site at Russell Rise is being scheduled for the erection of a school.

MALDEN.—The Maldens and Coombe Urban District Council propose the widening of Kingston Road, near Wickerage Lane at a cost of £7,358.

MANCHESTER.—The Educational Committee has prepared a scheme for the conversion of Alma Park Municipal School, Levenshulme, into a District Central School, at an estimated cost of £5,246.

The Board of the Manchester Babies' Hospital are contemplating an extension scheme. Plans have been prepared for new wards capable of accommodating 80 patients, and the Ministry of Health have promised a grant of half the cost of the new building—about £6,000 out of a total of £12,000.—The Education Committee propose to convert a part of the Alma Park Municipal School, Levenshulme, into a District Central School with 290 places, and, in addition, to make provision for Manual Instruction and for Instruction in Domestic Subjects for 80 pupils. The estimated cost in respect of the necessary structural work and additions, and the provision of the necessary equipment, is £5,246. Plans passed:—20 houses, Albert Road and Belgrave Road, Crumpsall; four houses, Rectory Road and Parsonage Street, Crumpsall; nine houses, Glen Avenue, Goodman Street and Cobden Street, Blackley; 16 houses, Clevedon Street and Vernon Street, Moston; five houses, Wilmslow Road and Parkfield Road, Didsbury; details of steelwork, addition to Museum, Manchester University, Oxford Road, Chorlton-upon-Medlock; addition to synagogue, Lansdowne Road, West Didsbury; 16 shops and houses, Platt Lane, Withington; three houses, Errwood Road and Crompton Road, Levenshulme; billiard hall and five shops and showrooms, Anson Road, Victoria Road, and Kensington Road, Rusholme; six houses, Circular Road, Withington; twenty-eight houses, Beresford Road, Hamilton Road, and Raincliffe Avenue, Rusholme; four houses, Manley Road; sixteen shops and houses, Platt Lane, Withington; nine houses, St. Werburgh's Road, Chorlton-cum-Hardy.

MERTHYR TYDFIL.—The Corporation are negotiating with the Gelligear Urban Council regarding a new road linking up Gelligaer with the Merthyr boundary.—The Corporation has deferred consideration of a suggestion for the erection of a public abbattoir.—Negotiations are proceeding with the Bute Estate for land for a central depot and omnibus garage.—A loan of £38,440 has been sanctioned for the erection of 50 houses at Pantscallog, and 28 houses at Aberfan.

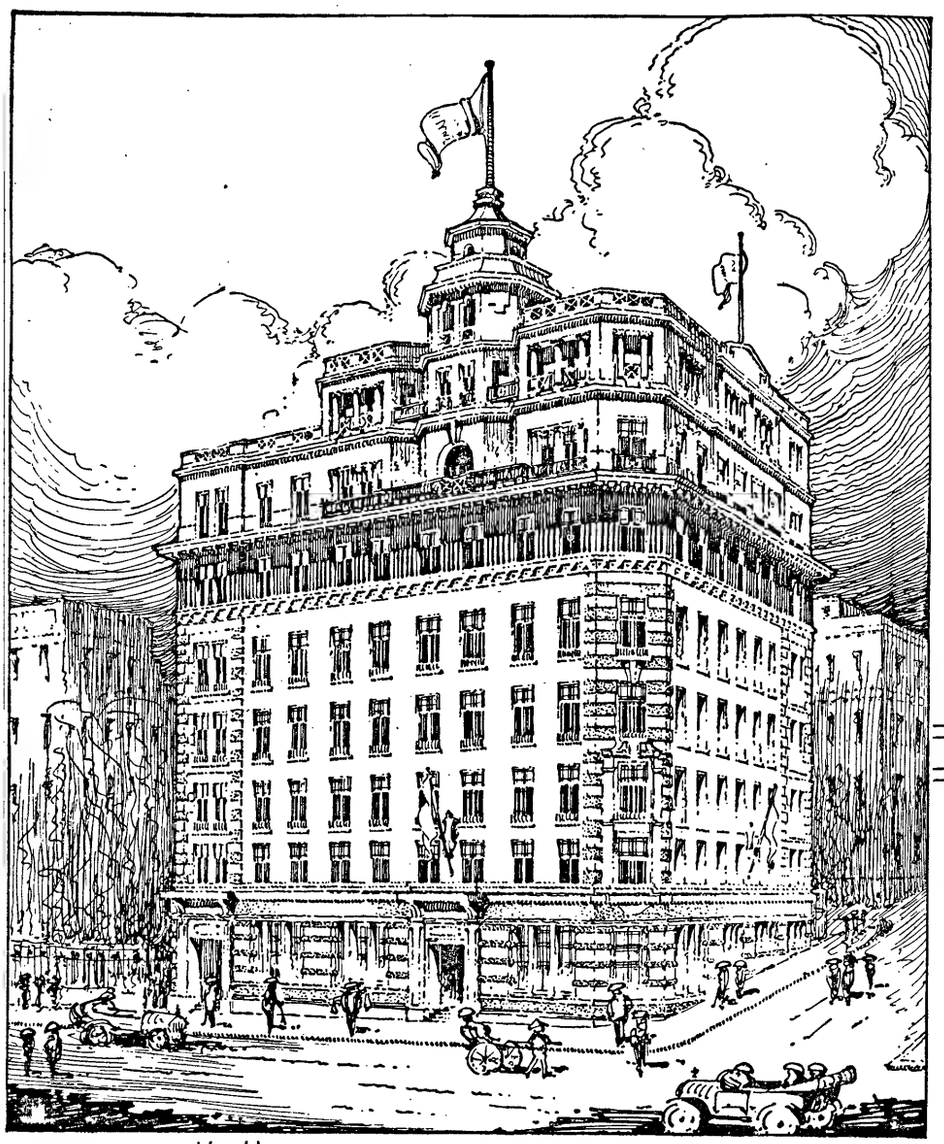
MIDDLESEX.—The Visiting Committee of the County Council recommend that Mr. H. G. Crothall, the County Architect, be appointed as architect for the erection of the proposed new Mental Hospital at Porter's Park, Shenley.

MILFORD.—The erection of a sanatorium for 200 patients on a site near the railway station is contemplated by the Surrey County Council, who are arranging for the Godalming Town Council to construct a sewer for the drainage. The cost is estimated at £80,000.

MITCHAM.—The County Council are being urged to purchase a site for a secondary school for girls.

NORTH-WEST KENT.—A conference of representatives of local authorities is being held to establish a Joint Town Planning Advisory Committee for the region of North-West Kent.

PLYMOUTH.—The Corporation are seeking a site in the vicinity of Octagon Street for the purpose of public baths and washhouses.—Tenders areto be invited for the erection of a mortuary. Loans of £36,770 have been sanctioned for improvements and road works.—In connection with contracts the Special Committee of the Corporation have decided that the architect shall have power to call for any evidence which he considers material for the checking of the accounts under the terms of the contract, and no final certificate will be issued until such evidence has been produced.—Plans have been prepared for a new street on the Ceringston Park Estate.—The Markets Committee have approved a scheme for the extension of the wholesale meat market at a cost of £7,000.—The tender of Messrs. Harris & Sons, £1,655, has been accepted for internal painting of the Corporation dwellings.—At the Housing Committee a letter from the Plymouth Mercantile Association calling the attention of the Council to the existence of many old and interesting buildings in the borough and to the desirability of their not



Stand 43, Avenues 5 & 6, at the British Empire Exhibition.

Architects, Messrs. Palmer & Turner, Consulting Architects, Messrs. Josephs.

Consulting Engineers, Messrs. S. H. White & Son and Logan & Reynolds.

MANY modern buildings are erected in the Far East with steel framing by Dorman Long and Company. The New Offices of the Asiatic Petroleum Coy. at Hong Kong, as above, embody about 1,260 tons of structural steel. It is British steel throughout, rolled and fabricated at Middlesbrough.

DORMAN LONG
AND COMPANY LIMITED
MIDDLESBROUGH

LONDON: 4, CENTRAL BLDS., WESTMINSTER, S.W.1

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134-25

being abolished, was read, and the Committee promised to consider any representation the Association desire to offer on the matter.—The Rev. J. H. Waddington has agreed to purchase from the Corporation a site on a housing estate for a church.—Elphinstone Barracks are to be rented from the War Office, and the Corporation have passed plans and estimates for a scheme to cost £1,500 for converting the place into temporary housing accommodation.—Three tenders were received for the erection of 134 houses at North Prospect, but in view of the excessive price the surveyor has been authorised to invite fresh tenders.—The Education Committee have prepared plans for premises on the Cobourg Road site for use temporarily as education offices and ultimately for school purposes when the central office scheme matures.—Plans passed: J. Mumford, six houses, Connaught Avenue; Wills & Co., six dwelling houses, Pennycross Park Road; W. C. Vickery, houses, Thornhill Way; W. Medland, house, St. George's Avenue; S. R. Griffen, house, St. Barnabas Terrace; A. D. Bickell, two houses, Swilly Estate; F. Westcott, six houses, Swilly Estate.

SATTENHAM.—The Surrey County Council are seeking sanction to a loan of £39,240 for the erection of a tuberculosis sanatorium.

SOUTH SHIELDS.—The Town Council have a scheme for the provision of a verandah at Cleadon Park Sanatorium to cost £1,000. Consideration is also being given to the question of extending the Sanatorium by the utilisation of the stable buildings, or by the erection of new premises.—Additional work at a cost of £12,500 is proposed for the south foreshore development scheme.—The tramcar sheds are to be extended, and tenders invited for the steelwork.—Approval has been given to the layout of the estate of St. Hilda's Miners' Lodge, providing for the erection of 102 houses.—The extension of King George Road, at a cost of £111,640, is being advocated.—Plans passed:—Messrs. J. H. Morton & Sons, for Messrs. The Hedworth Lodge of Freemasons, Masonic Hall, Dean Road, Westoe.

SURBITON.—The Board of Education have approved of the purchase at a cost of £4,000 of Allbury House and grounds as a site for a secondary school for 200 boys. Sketch plans for the conversion of Allbury House have been submitted to the Board, who have asked to be furnished with preliminary plans for a future complete school for 400, and with information as to playing fields for the school. The plans of the complete school are in course of preparation.

SURBITON.—The Urban District Council have agreed with Messrs. Jones & Co. as to a scheme for the development of the Westfield Lodge Estate.

WANDSWORTH.—The Finance Committee has prepared estimates totalling £395,743 for relief works, and £2,868 for additions to the borough engineer's office.—In view of the London County Council inquiry into London bridges, the Borough Council are to urge the need for the reconstruction of Wandsworth Bridge.—The Borough Council are urging the London County Council to sanction a loan of £29,574 for the extension and reconstruction of the Town Hall, though the County Council have questioned the need for the scheme at the present time.—The Council propose to again urge for sanction to loans for the erection of a bath for Streatham, and a public library for Earlsfield.—Plans approved: House, Sutherland Grove, Southfields; five one-storey shops, Garrett Lane; building in Valley Road, Streatham, adjoining existing building of Messrs. Curtis Bros. & Dumbrill, Ltd.; three houses, Chartfield Avenue, Putney; house, West Hill, Southfields; house, Abbotsleigh Road, Streatham, for Messrs. W. Downs, Ltd.; cottage, Roehampton Court, Putney, for Hays Wharf, Ltd.; house, West Hill, Southfields, for Mr. C. M. Gibbs; club house, Kenilworth Court, Putney, for Messrs. W. & E. Hunt; house, Old Devonshire Road, Balham, for Mr. E. Wilson; four houses, Moyser Road, Streatham, for Mr. H. R. Thorp; seven houses, King's Avenue, Clapham, for Mr. F. Wickins; twenty-two houses, Byrne Road and Calverden Road, Balham, for Messrs. H. F. Buchan & Co.; three houses, Valley Road, Streatham, for Mr. W. J. F. Gillett; house and shop, Streatham High Road, for Mr. A. C. Shepherd; a collodion house at the works, Garrett Lane, for the Veritas Gas Mantle Works; boiler house at Columbia Gramophone premises, Springfield, for Messrs. H. & T. Danks (Netherton), Ltd.; depot and stores and apartments at Streatham for the Borough Council; house, Genoa Avenue, Putney, for Messrs. H. Dakin & Co., Ltd.; eight houses, Ellerton Road, Springfield, for Messrs. Holloway Bros. (London), Ltd.; six houses, Fishponds Road, Balham, for Messrs. Knowles & Bird; pavilion, Holly Tennis Club, Putney, for Messrs. G. E. Sturgis & Son; house, 8, Leigham Court Road, for Mr. J. T. Taylor; house, Old Devonshire Road, Balham, for Mr. E. V. Wilson; extension, Mirror Laundry, Pentlow Road, Putney, for Mr. H. Roffey; house, Queensmere Road, Southfield, for Mr. E. G. W. Souster.

Trade Notes.

The "Flibac" patent hat and coat peg is a simple, ingenious, little article of great public utility. It was originally designed to supply a long felt want in churches, institutes, concert halls, theatres, cinemas or any place of public resort, where there is so frequently a difficulty in finding a suitable place for the disposal of a hat, or lady's hand bag or small parcel. When fixed to the back of a seat it completely gets over this difficulty. Since this useful article was put upon the market, many other places have been found where it can be used to advantage, such as on backs of doors, that open level with walls or in narrow passages, where ordinary projecting pegs would be in the way, and liable to do damage to walls or injury to people who might not see them in the dark. For caterers who have to provide special temporary accommodation for guests at parties they are found to be great space savers, as they can be packed so closely together when mounted on wood rails, in travelling from place to place. They are very useful in motor cars, yachts' or ships' cabins, and lavatories of corridor trains. They have been recently adapted for use in tents, by being attached to metal collars of any size, to fit on poles, or singly, on framework of bathing tents, where poles are not used. They can also be used to the advantage of the public, by being fixed on legs of tables in restaurants, and in bungalows or small houses. Where space is an important consideration they will be found a benefit to all who use them. They can be obtained at all stores and camp equipment outfitters. In the event of any difficulties further particulars will be supplied by Mr. William Owensmith, 229 Whitehorse Lane, South Norwood, S.E.25.

Messrs. Owen Owen's new premises, London Road, Liverpool, are being reconstructed and decorated by the Allied Arts and Crafts Guild, of 4 Brook Street, Birmingham. The ground floor is being carried out in character consistent with the Doric style, whilst the Ionic period will give the character of the first floor decorations; on the second floor a restaurant is being carried out in the Renaissance style, and the smoking room will be furnished and panelled to represent a room in the Jacobean period. These decorations will be carefully and truthfully carried out, and thus add considerable popularity to the premises.

Messrs. Wailes Dove Bitumastic, Ltd., of 5 Nicholas Buildings, Newcastle-on-Tyne, request us to announce that their London offices are at 1 Billiter Avenue, E.C.3, and that their telephone number is Avenue 174; telegraphic address, Bitumastic Fen, London.

Liverpool Cathedral.

List of contractors, etc.—For the building and foundations, Messrs. Morrison & Sons, Ltd., Wavertree, Liverpool; heating, ventilating and fire protection, Messrs. G. N. Haden & Sons, Ltd., Trowbridge; marble flooring and terrazzo work, Messrs. John Stubbs & Sons, Crown Street, Liverpool; marble work other than flooring, Messrs. Farmer & Brindley, Ltd., 63 Westminster Bridge Road, London; electric lighting installation, Messrs. John Hunter & Co., Rodney Street, Liverpool, subcontractors to Messrs. J. Hunter & Co., The British Thomson-Houston Co., and Messrs. Osler & Co., 230 Broad Street, Birmingham; asphalting, The Limmer & Trinidad Lake Asphalt Co., Ltd., 34 Victoria Street, London, S.W.; woodwork, Messrs. Morrison & Sons, Ltd., Wavertree, Liverpool; the choir stalls were made to the order of the donor by Messrs. Waring & Gillow, Ltd., Bold Street, Liverpool; organ builders, Messrs. Henry Willis & Sons, and Lewis & Co., Ltd., 234 Ferndale Road, London, S.W.9; bell founders, Messrs. Mears & Stainbank, 32-34 Whitechapel Road, London, E.1; stained glass makers, Messrs. Powell & Sons (Whitefriars), Ltd., Wigmore Street, London, W.1 (the whole of the stained glass in the choir, transepts, aisles and Lady Chapel), Messrs. Morris & Co., 17 George Street, Hanover Square, London, W.1 (chapter house windows), Messrs. Burlison & Grylls, 36 Great Ormond Street, London, W.C.1 (ambulatory windows), Messrs. C. E. Kempe & Co., Ltd., 28 Nottingham Place, London, W.1 (chapter house staircase windows); metal workers, Broomsgrove Guild, Broomsgrove, Worcester (bronze choir gates, reading desk on lectern), W. Gilbert, 62 Weamen Street, Birmingham (Communion rails and bronze work on memorial reredos and cenotaph), Messrs. W. Bainbridge, Reynolds, Ltd., Manor House Metal Works, 7b Old Town, Clapham, London, S.W.4 (silver ornaments, door furniture, bronze grilles, Lady Chapel—electric light fittings); embroidery mounters, Messrs. Watts & Co., Ltd., 66 Baker Street, London, W.1; gilder and decorator, G. Tosi, 58 Beauchamp Place, Brompton Road, London, S.W.

VOL. CXII.—2899. THE ARCHITECT JULY 11, 1924.

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"The Architect in Practice."*

Major Barnes has written a book of some 134 pages on this subject which contains much that is sound, and many things which most of us think go without saying, but which are doubtless worth repetition, as Professor Huxley used to consider it an axiom to assume that his audience knew nothing of the subject-matter he was dealing with.

We quite agree with Major Barnes that, though the architect is debarred by etiquette from touting for work, there is no reason why he should not go where work is; and though he may not advertise, there is no reason why he should not make himself known. We are inclined to think it almost possible to do anything so long as we do it in the right manner, and to complain of a man's advertising or pushing himself is to say that he has done it in the wrong way. It is methods rather than facts to which the critic finds objection. We knew a younger man associated in business with an older and more experienced partner who met a client from whom they had expectations one evening, and the younger man inquired anxiously next day whether his partner had discussed the matter in question with him at the dinner, and was somewhat disappointed to learn that it had never been mentioned. But that reticence served better than the show of greater eagerness would have done, and the commission came along in due season. Eagerness often defeats the object to be gained, for it may be read as a sign that a man is *in extremis*, and we most of us know from experience that we ourselves have a tendency to place work rather with the fortunate than the needy, a tendency which may altruistically be deplorable, but which we believe to be one of the most enduring of human instincts. Work will often seem to come almost automatically to those who are in no need of it rather than to those to whom it is all important. And as it is wise to assume a virtue even if we have it not, the architect is wise if he conceals the feet of clay on which his business chances often seem to rest at the outset of his career.

Another and, we believe, a most important thing is not to be influenced by the desire to secure maximum fees for all work an architect carries out. If we look at the schedule of charges laid down by the R.I.B.A. —which, we might add, has to many clients the appearance of a formidable document—we shall discover in it many little items such as charges for measuring up old buildings and making additional sketches, which are justified, but which are frequently better left in abeyance. We can readily irritate a client by a carefully made out account in detail, while he will pay a simple percentage on the cost of executed work without question. In most cases we believe that architects are wise to let smaller amounts—by which perhaps an additional one-half per cent. more might be justified—go rather than to allow a client to believe he has been stiffly charged, and we believe that in many cases where work has been abandoned from any cause the architect is well advised to deal very leniently with his clients in the matter of fees. One never knows what misstatements, unintentional for the most part, may be made behind one's back, or what effect they may have on outsiders. The architect is therefore well advised in the matter of charging to have his clients in the frame of mind which disposes them to seek him again, and no one should act as though any transaction stands alone.

We have found younger men more disposed to be sticklers in this respect than their seniors, not because they are more grasping, but because they are more dependent on the outcome of single commissions, and this is a tendency to be guarded against.

The direction in which an architect can make himself most valuable to the average man may be very clearly defined. It is by remembering that building represents capital, and the most valuable asset that any architect can have is the ability to so dispose his buildings as to make the best use of any given piece of ground. People do not build primarily to create a thing of beauty or to add a chapter to the history of art, but to meet a necessary want or to directly make money. It is, therefore, wise not to be led astray because one finds it possible to carry out work which the client may subsequently regret, and to remember that cool criticism is always bound to follow the heat of enthusiasm, and that every client has "candid friends" who will not hesitate to prove to him that his architect has made mistakes.

As to the training of the architect, we are not altogether convinced that the tendency to replace the old system of pupilage by the work of the architectural schools is wholly good. We believe that the best solution is to let men go through both as far as possible concurrently. We are quite certain that the processes of measuring and sketching of old buildings, which were such prominent features of the student's training years ago, are somewhat neglected now. If the student has means—and no one should take up the calling unless he has some sources of private income—we believe men would gain immensely by giving up several years to measuring and sketching of old buildings here and abroad, and that such an experience would be of enormous benefit to their powers of design. Measuring and sketching teach men what they cannot learn in any other manner, and what they have no time to learn after they have set up in practice for themselves.

We quite agree with what Major Barnes says about clerks of the works. Their employment should be unnecessary except in the case of very large or important buildings, and the client is better off if he employs a thoroughly good contractor whose tender is more than that of another whose shortcomings render the constant presence of a clerk of the works essential. We prefer a good builder's foreman to any clerk of the works we could obtain.

* "The Architect in Practice." By Harry Barnes. With a preface by J. A. Gotch, F.S.A. London: Ernest Benn, Limited, 8 Bouverie Street, E.C.

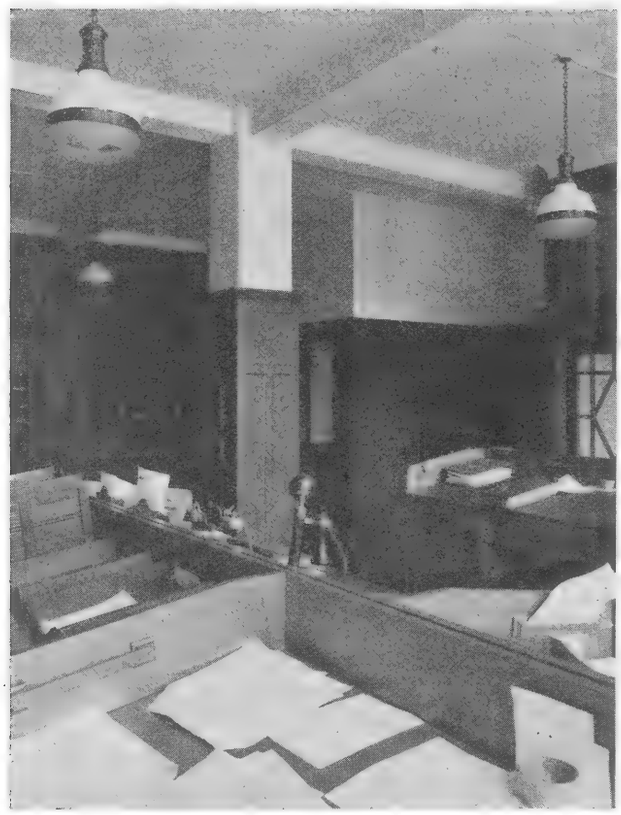
Our Illustrations.

GATEWAY TO FORECOURT, L'ANCIEN EVECHE, BLOIS. Drawing by G. Berkeley Wills.

"RENA HOUSE," VAUXHALL BRIDGE ROAD, S.W. Eugene C. Beaumont & Son, Architects.

"Rena House," Vauxhall Bridge Road, S.W.

Eugène C. Beaumont & Son, Architects.



"RENA HOUSE": TYPICAL VIEW OF OFFICES.
Eugene C. Beaumont & Son, Architects.

This building has been planned and built specially for the wholesale business of brush manufacturers and hardware merchants. The ground floor contains the board room, the general offices and goods receiving and packing departments, the three upper floors being stock warehouse departments, with specially fitted stock cases, and departmental offices. Additional light has been provided on the several floors by means of a central area starting at the first-floor level with a large skylight over the ground floor. A double dock is provided in the side street, conveniently situated to facilitate the quick receipt and delivery of goods. A suite of rooms are provided on the third floor for a resident caretaker and immediately approached by the fireproof stone staircase. The chief contractors were Messrs. J. Jarvis & Sons, of Hackney. The whole of the floors are fire-resisting and were constructed by the Kleine Patent Fire-Resisting Flooring Syndicate. The main walls are in Fletton brickwork in cement, the Vauxhall Bridge Road and Regency Street fronts being faced with Messrs. Collier & Sons' "Old English" red facing bricks.

The stonework to the street fronts is all in the Empire Stone Co.'s white artificial Portland stone P.I. colour.

The following is a list of the other sub-contractors:—Steel construction, the Aston Construction Co.; metal windows, Messrs. Maclean & Co., of Glasgow; metal skylight and dry glazing, Messrs. W. H. Heywood & Co., of Huddersfield; marble work and jointless flooring, the Arts Pavement and Decorations, Ltd.; hydraulic lift, Messrs. Aldous & Campbell; hot water heating, the Wembley Heating Co., of Wembley: the system installed at Rena House is known as the Two Pipe Under-Feed system, the boiler being fixed in the basement and the mains carried in trenches on the ground floor to feed the various risers throughout the job. The whole system is worked entirely on the gravity method and is extremely easy to operate, attention only being required to the boiler about three times a day. Each radiator has separate control which allows for one or more radiators being isolated without affecting the rest of the system. Another point peculiar to the system is that the rising mains are of a small size, and when entering the building no large and unsightly pipes are visible. The system has been designed for a temperature of 60° in the offices and 55° in the warehouse when the outside air is at 32°, and it is found that the amount of heat available is ample for all needs. Stone staircase, the Empire Stone Co.; asphalt roof, Standard Roofing Co.; locks, fastenings and special ironmongery, Messrs. W. & R. Leggott, Ltd.; metal lettering and bronze plates, Messrs. Jones & Willis; pavement lights and slab partitions, Messrs. J. A. King & Co.; sanitary goods, the City Iron Co., of Upper Thames Street; granite columns, Messrs. Fenning & Co., Palace Wharf, Rainville Road, Hammersmith, W.6; roller shutters, Messrs. Francis & Co.; special joinery and trade fittings, Messrs. J. Jarvis & Sons and Messrs. Ogilvie & Co.; paint, the Indestructible Paint Co. As regards decoration work, very careful consideration was given to this, as, apart from the heavy cost involved, it was desirable to use colours on the surfaces that would provide a secondary source of light. The principal shades used were white, ivory white, apple green, light stone and oak, and the whole of the paint used, from the priming coats upwards, was supplied by the Indestructible Paint Co., Ltd., King's House, King Street, London, E.C.2. In view of the durability that this well-known paint possesses we should imagine that it will be some considerable time before the repainting of this building will become necessary. Since the building was completed we understand that the owners have commenced treating the cement floors with Kewato Cement Floor Paint (also manufactured by the Indestructible Paint Co., Ltd.), with a view to preventing the floors disintegrating and reducing the surface dust to an absolute minimum. Wall covering, Berger's Factory White.

"RENA HOUSE": VIEW OF ENTRANCE HALL.
Eugene C. Beaumont & Son, Architects.

Notes and Comments.

Wet Time and Hours of Work.

We give in this issue a letter from Messrs. Bovis, stating their views on the present questions under dispute, namely, that the employers are attaching far too much importance to the question of working hours, and expressing sympathy with the men's demand for the recognition of "wet time." We believe the answer the Employers' Federation would make to these two suggestions is that they agree with Messrs. Bovis that the all-important question is that of output, and if the operatives' unions would frankly meet the employers with a view of securing better output they would be willing to concede many of the points now in dispute. The fact that output is less than it should be makes it more important from the contractors' standpoint to take advantage of the better climatic conditions of summer, while low output makes it more difficult to meet the men on the question of "wet time." Higher output would decrease the cost of building and out of the money so saved it would be practicable to put something aside to meet the increased cost involved in the recognition of "wet time."

The Channel Tunnel.

We regret that the Channel Tunnel scheme should have been rejected by the Government on the unanimous advice of the Committee of Imperial Defence, but we can only assume that the facts on which judgment was based must have been unusually emphatic, since in the opinion of the Committee the dangers of the project are considered greater than they would have been five years ago. This last view is surprising to us in the light of recent history. For the period previous to 1914 it was conceivable that conflict might possibly have arisen between this country and France, and peace or war were actually in the balance in the time of the Fashoda episode, but since the war it is not conceivable that this country and France, united as they are by common memories, should ever find themselves on opposing sides. There remains necessarily the question of the dangers which would occur were the two terminal points seized by a common enemy. But it is clear that overwhelming objections must exist in the opinion of those best qualified to judge and we can only regret that a means of transit which would have promoted friendly intercourse with our nearest continental neighbours has been for the present negatived.

Building Materials.

"The Times" states that the lower wages paid abroad and the rates of exchange are resulting in considerable importation of foreign building materials. Belgian bricks are being offered "alongside" wharf in the Thames for less than they can be sold "in the field in Kent." These Belgian bricks are not quite English standard size and their quality is not yet known, but it is stated that they cost 30s. to 20s. per thousand less than Kentish first and second quality stock bricks. It is also said that Flettons will not be supplied by the makers to localities South of the Thames, the makers, in view of the demands on them, considering that the South of England should deal with its own needs. German baths have been largely imported and sold at low prices, but many "purchasers" of these "bargains" have had cause to regret their action on account of the inferior enamelling used. The result being that the high prices obtained for English made goods subsequent to the war have been reduced and the English manufacturers are more than holding their own. "The Times" states that an endeavour is being made to introduce a low priced foreign cooking stove—probably of German origin—but that it is not being taken up largely perhaps because of the difficulty of replacing broken parts, but also we think because of the excellent quality and make of our grates and stoves which leave little to be desired. It is more satisfactory that our manufacturers should be able to hold their own in the face of foreign competition than that there should be no competition, which reminds us of David Harum's saying, "a reasonable amount of fleas is good for a dog, it keeps him from worrying about being a dog!"

The R.I.B.A. Poll.

The poll of the members of the R.I.B.A. on the question of the absorption of the Society of Architects has resulted in 1,712 votes being cast in favour and 267 against, a majority of about 6½ to 1, so the question is finally disposed of and the Council's policy receives an emphatic endorsement. When once a movement sets in time usually helps the majority. At last year's Council Election the poll was practically 2 to 1, at the recent election 3 to 1, and now 6½ to 1, showing the tendency to adhere to the winning side. We regret the decision, which we believe to be mistaken, but it will be accepted loyally by all, though we believe many votes have been given not for Unification *per se*, but for Registration, which we think is another and independent issue which will not be affected by Unification. But we can none of us read the future with certainty, and we shall be delighted if a policy we believe to be mistaken proves to be sound and is justified in its outcome.

The question has been settled by the right method and though a good deal of unnecessary trouble might have been avoided had that method been adopted some months ago, all will now be satisfied, and the Council's work will not be impeded by any opposition from those who have hitherto disagreed with them.

The Building Situation.

The building situation is humourously dealt with in our contemporary "Tee Square & Tape," in which we read the following fable:—

Now in the days when Labour governed they did bring up certain enactments for the better providing of houses for workers and others receiving the dole. And they did give it out that in a short time there should be houses for all; very beautiful and commodious houses, and at a very low price—to the tenant. And the hearts of the homeless were lifted up and they gave praise unto Labour.

And a certain Council at Phlegham said unto themselves at their meeting—"This is a great work, and necessary." And they did acquire land, and did prepare for a big scheme, yea, plans, specifications, etc., etc., complete.

And after certain days, a tender having been accepted, the Contractor sent unto the site his Advance Guard—a Foreman, and certain hewers of wood and drawers of water who did erect certain offices and sheds. And this being done, the labourers did disturb the face of the earth in their accustomed way, digging trenches wherein that foundations might be laid.

And the Foreman did put up nice notices stating that there was work for men of all trades. And the Chairman of the Council was much pleased when he saw all these things—having come thither with his Architect.

And the people of those parts were not a little excited; and such as were not ratepayers did sing praises unto Labour very loudly indeed.

And after many days the Chairman came again unto the place with his Architect, having heard evil reports. And he found the Foreman there almost alone; and little or no work done.

And when he would have chid the Foreman for this his heart failed him, seeing his worried and ageing looks, and the beautiful, large notice which he had prepared. And after some talk the Chairman went his way hoping for the best.

But years later, when he, being an old man, came again, he found that the work had not prospered; the Foreman. aged, and brought low, was still there, but his helpers were very few. And even for the few that he had there was little or no material with which to build; and the one house which was roofed lacked plaster.

And the Chairman, his Architect, and the Foreman lifted up their voices and wept. And their tears were the bitterer because at Much Phlegham, which was near by, the housing had prospered apace, and the output was quite ten times better, and there were already nine houses occupied. For though at Phlegham wireless and other treats for Tradesmen were provided, the Council at Much Phlegham being filled with Low Cunning, and having no Scruples, had opened a Free Bar on the works so that quite three bricklayers had been known to work there at one time, and those carting material would time and again, mistaking their direction, deliver there any odd merchandise that they had.

And the fame of the Scheme was noised abroad, and men came from distant parts to see and to wonder at the rapid progress.

If we could get over our difficulty by the provision of free

beer we might be induced to try it, but we believe it would result in the working of still shorter hours, while its cost would be a consideration!

Reunion of the Profession.

The "Evening Standard," which we have not hitherto regarded as one of our comic papers, gives the following account of our doings:—

ARCHITECTURAL REUNION.

The two associations of architects are, I learn, about to amalgamate.

The younger body, the Society of British Architects, seceded from the Royal Institute of British Architecture about a generation ago in disgust at its alleged lethargy. But the new society did not set up examinations. True to its principles, it nominated men for membership on the ground of the individuality of their work.

As many of its nominees had taken the Institute's examination, the two bodies have common members and reunion has thus been made easy.

The purpose of the fusion is to make possible a Register of Architects. As the case of doctors and dentists shows, registration maintains the standard of a profession.

This may be regarded in two lights: as an evidence of the public interest in architects and their doings, or, on the other hand, as indicating that the education of the public is not yet completed.

Gateway and Approach to Forecourt of the Evêché, Blois.

G. Berkeley Wills, A.R.I.B.A.

ENTRANCE GATEWAY TO FORECOURT.

Blois, unlike Tours or Amboise, stands in a fine position on the north bank of the Loire, facing south and east over the river towards the flat country beyond, and the forests of Cheterborg and Chambord. On the east side of the Rue Denis Papin, which leads up from the bridge to the monumental flight of steps at the north end, lies a part of the old town to the narrow winding streets, either brick paved, as the Rue Pierre de Blois, or a series of steps as the Degrés St. Louis. Most of these streets, climbing the steep sides of the hill, contain interesting old half-timbered or Renaissance houses, the latter often with good ironwork to the balconies, and eventually find their way out at the top to the Place St. Louis.

On the east of the Cathedral St. Louis, which was partly rebuilt by J. H. Mansard—notably the buttresses and west tower—stands the Evêché with its terraced gardens, built in 1697 by Jacques Jules Gabriel.

On the north side of the Cathedral, between it and, at a higher level, the Rue du Haut Bourg, is a space about thirteen yards wide which formed apparently the only approach available to Gabriel to his new building. How he accomplished a dignified entrance may be seen from the accompanying illustrations.

The gates from the Place St. Louis, to the entrance lodge on the left masking the difference in levels, lead to a paved "place" with the inevitable row of clipped trees screening the road opposite the Cathedral, and with semi-circular termination at the further end pierced by the large gateway to the forecourt.

This gateway, which measures about 24 ft. to the underside of the entablature, is of outstanding merit. The approach to the Evêché, only obtainable through this gateway in the extreme corner of the forecourt, clearly needed emphasising, and this the architect has done in no uncertain manner.

The semi-circular headed gate measuring 10 ft. wide is flanked by Doric pilestones carrying full entablature and pediment which is straight on plan on the forecourt side, but curved on the side to the "place," thus carrying round the line of the semi-circular termination. On each side

ENTRANCE GATEWAY, BLOIS.

are carved brackets standing on the walls to the forecourt and cleverly masking the awkward junction of the curved with the straight line. The details and carving throughout are refined, while the bold drop sways on the brackets are evidently by the same hand as those on the dormers of the

Evêché. The enrichments and carving have unfortunately weathered rather badly.

The gateway at the west end does not call for special comment. The vertical stone joint through the left of the pilasters is a defect that could have been easily avoided.

The layout of this little " place " with the terminal gateways is a good example of how difficult conditions so often produce good results when tackled by the right man.

Correspondence

[The Editor will not be responsible for the opinions expressed by Correspondents.]

The Building Strike.

To the Editor of THE ARCHITECT.

DEAR SIR,—We have been asked for an expression of opinion regarding the present situation by the Press Association, and feel it a courtesy to our own trade papers that we should give a brief résumé of what we have passed on to them.

Accordingly the enclosure is sent to you with the compliments of,—Yours, etc.,

BOVIS, LTD.

Although during the past few months Messrs. Bovis Ltd. have resigned from the Employers' Federation, they have decided to support that body pending further information on the matters in dispute.

Referring to these, they express the view that the employers are attaching far too much importance to the slightly extended number of hours, instead of attacking the more serious problem of the output which the men are giving whilst they are at work.

The arrangements which their company suggest in respect to this would operate to the advantage of the industry, and at the same time, afford the men the security they demand.

The firm has some sympathy with the demand of the men in respect of the loss of " wet time " at present suffered by them.

Their suggestion to overcome this is the formation of a scheme whereby the very small amount of a fraction of a penny per day per man, and an equal allocation by the employer would provide sufficient to pay a full week's wages to all operatives in inclement weather.

EXTRACTS FROM THE MEMORANDUM ISSUED BY THE NATIONAL FEDERATION OF HOUSE BUILDERS.

The Committee of the National Federation of House Builders having examined the Housing (Financial Provisions) Bill now before Parliament, desires to draw attention to the effect which the Bill, if it becomes law in its present form, will have upon the future provision of houses for the working classes of the country.

The Committee realises with regret that financial assistance is still necessary to encourage the erection of houses of a small type; and is convinced that stability to the trade can only be secured by the adoption of a fixed housing policy spread over a number of years. The assistance should be given with due regard to the effect it must have upon the eventual economic position of the housing industry, and it should also be designed to encourage the investment of private capital in house property.

These conditions were fulfilled to a large extent by the Housing, etc., Act, 1923, and the fact that working class houses are now being built by private enterprise with assistance under the Act for sale to the occupier at the rate of 68,000 a year proves that the Housing, etc., Act, 1923, was a workable practical measure. The assistance given in respect of these houses varies from £75 to £100 a house, which is considerably less than half the amount which houses built under any other State-aided schemes have cost the public purse.

The Housing (Financial Provisions) Bill contains the concrete proposals of the Government for the future assistance of housing, and the Committee of the National Federation of House Builders regrets that the policy which has been so clearly outlined by the Prime Minister and the Minister of Health is not reflected in the Bill, as it has been submitted to Parliament. The Committee desire to draw attention to important points on which the Bill fails to carry out the expressed intentions of the Government, and, in consequence, will do irreparable injury to the housing conditions of the country if it becomes law in its present form.

1. *The Restoration of Confidence.*—The Housing, etc., Act, 1923 (Chamberlain Act) provided that the Local Authority should satisfy the Minister of Health that the housing needs of their area could more appropriately be met by the provision of houses by the Authority themselves before they obtained his sanction to their own schemes. This resulted in the encouragement of private enterprise in most districts, and two-thirds of the houses built and building under the Act are private enterprise schemes. This clause is repealed by the new Bill, and Socialistic Local Councils will have a free hand to refuse assistance to private enterprise and to build houses themselves at double the cost to the public.

2. *Assistance for Houses for Sale to the Owner Occupier.*—Although we have the assurance of the Minister of Health that the Bill " leaves intact the provisions of the 1923 Act, which gave a subsidy to private enterprise in building houses for sale," the clauses dealing with this particular point are ambiguous in the extreme, and if it is the intention of Parliament to continue this most valuable phase of the Government's housing activities, it should be made clear in the wording of the Bill.

3. *The Size of the Houses.*—Although it is acknowledged that " not 10 per cent. of the Addison houses are inhabited by the class of people whose needs must be solved," the Bill does not make any special stipulations for the erection by the Local Authorities of smaller houses than the 950 ft. house. The 950 ft. houses are not suitable for the lower paid working classes either in rents, which are too high, or in style, which is unsuitable, for they are generally built in pairs at about 12 to the acre. Unless some pressure is brought by Parliament on Local Authorities to build smaller types of houses in rows or terraces at 16 to 20 to the acre, there can be no amelioration of the housing conditions in the slums and the semi-slums of our large cities, and the inevitable effect will be that the poorer sections of the working classes will continue to be rated and taxed so that their better paid fellow workmen can be provided with houses at uneconomic rents. Although upwards of 200,000 houses were built under the Addison schemes at a heavy cost to the general public practically nothing has been done for those poorest wage-earners who are least able to help themselves. The housing requirements of that section of the better paid working classes who require the 950 ft. houses have been and are being efficiently met by the Government houses already erected, and the subsidy to the owner occupier. On June 4 last 141,065 houses had been approved by the Ministry of Health for assistance under the 1923 Act in the ten months since the Act was passed, and practically all of these houses are suitable only for the thrifty and better paid working classes. In the opinion of the Federation the whole activities of the local authorities in their own schemes should be directed to the relief of the poorest section of the working classes. If this is done every section of the working classes will receive fair and equitable help in their housing requirements.

The Committee of the National Federation of House Builders desires to put forward the following suggestions as important principles which should be enforced if it is hoped to secure the most rapid production of houses from all available sources, and if the State-aided housing is not to destroy all private enterprise in the great business of housing the people.

1. That the total subsidy which is to be applied by the local authorities in building houses to let to tenants should be available to the private builder who is prepared to build similar houses to be let at similar rents.

2. The local authorities should fix a minimum rent for their houses at a figure which will show an economic return on the capital employed after allowing for the annual grant.

The object of these suggestions is to render it possible for private capital to be attracted to housing, and for investors to return to housing as a favourite investment. House property is still one of the most stable of investments, and, as before the war an annual sum of upwards of twenty millions sterling was found by the people themselves in building houses to be let to tenants, it is believed that, given a fair opportunity, large sums can be again secured in the same service.

3. That the building schemes of local authorities for houses for letting should be limited to the provision of smaller types of houses built in rows or terraces at 16 to 20 to the acre, and that those requiring the larger types should be encouraged to buy for their own occupation.

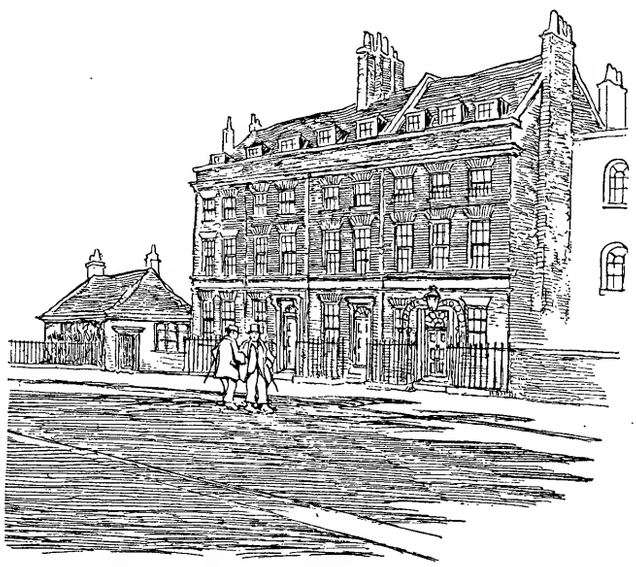
In some towns the houses built under previous schemes have been let to classes of tenants who are able to purchase their own houses, and who would do so if the local authorities' houses had not been available, while the schemes have provided practically no relief to the overcrowding in the poorer districts. It is suggested that the houses most required by those incapable of solving their own problems are houses of about 800 feet floor area, and that by building in rows at about 16 to 20 to the acre the most economical and suitable type of construction can be achieved. By building the 800 ft. house at 20 to the acre, less than one-fourth of the land is built upon, and ample light and air is secured.

4. That the subsidy to persons building or purchasing a new house for their own occupation not exceeding 950 ft. floor area should be continued and fixed at £100 in all cases, and that loans be made by the State or local authority to enable any person to purchase his house by finding 10 per cent. of a fair purchase price, less the amount of the subsidy if the house does not exceed 950 ft.

Every house built and sold to the owner-occupier is as much a contribution to the solution of the national problem as a house to be let.

Downing Street.

By Charles G. Harper.



NOS. 10 & 11 DOWNING STREET.

There is in Whitehall an obscure and dingy street, a little street which, in a sense, is a "no thoroughfare," for no wheeled traffic can do more than enter it and return; although pedestrians may pass through, to the Horse Guards Parade and St. James's Park by descending the fourteen steps, to that lower level. This dingy little street is, however, the most historic street in London, for it is Downing Street. No one halts to consider how it was given its name; nor do Londoners as a rule care to enquire how it comes about that the "First Lord of the Treasury," or, as we style him generally, the "Prime Minister," or, very wrongly, "the Premier," resides during the term of his office at the head of the Government at the famous "No. 10."

The street is named from one of the most despicable characters in the long course of English history—from Sir George Downing, Baronet, born in 1623. He died sixty years later, not very full of years, and entirely without honour, a political adventurer, and a traitor to all parties in turn; the man to whom Pepys, in his famous Diary, alludes as a "perfidious rogue."

Downing had on his mother's side a not undistinguished connection, for his uncle, her brother, was John Winthrop, Governor of Massachusetts, on whose invitation the family in 1638 visited America. George Downing was educated there, at Harvard. In 1645 he voyaged to the West Indies and acted in the capacity of ship's chaplain. Soon afterwards he is found in England, and then, in 1650, as "Scout-master General" to Cromwell's army in Scotland. Wherever a chance of preferment and good pay, no matter what the occupation, there was George Downing. Four years later he married Frances, fourth daughter of Sir William Howard of Naworth, thus securing the interest and patronage of that family, which afterwards secured the Earldom of Carlisle, and being returned as Member of Parliament for that city. He sat afterwards for the Haddington Burghs and for Morpeth.

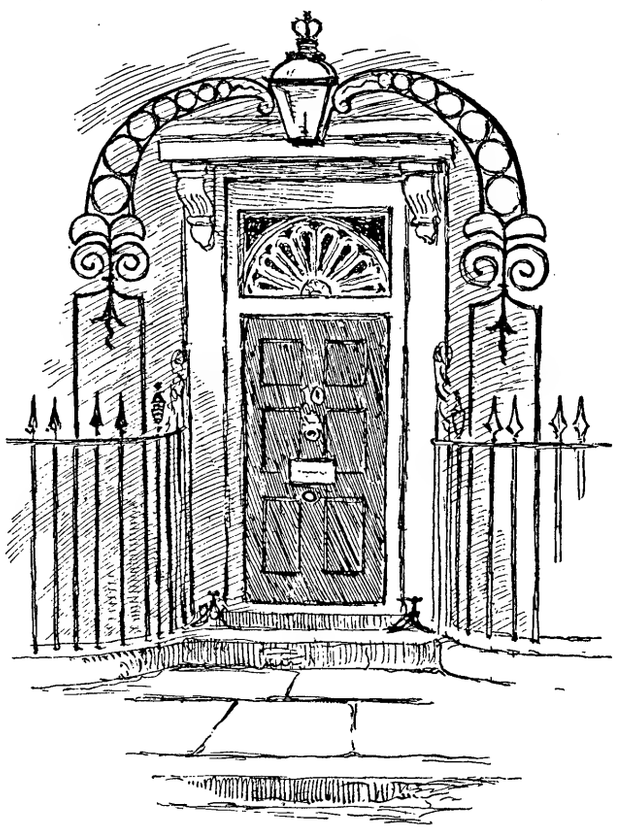
Cromwell's star was still in the ascendant, and Downing was one of those who proposed offering him the Crown. He was sent as remonstrant envoy to France, to reprove Louis XIV for the massacre of the Vaudoir in 1655. Two years later he was appointed British Minister to The Hague, a post with £1,000 a year; and in that occupation he made acquaintance with the exiled Charles the Second; and seeing, later, how affairs were shaping in England towards a restoration of the monarchy, he so trimmed his course that he persuaded Charles he was no convinced Republican, but had sucked in such strange ideas in America. Charles was no fool, and probably believed little or nothing of that: but he saw Downing might be useful, and he forgave his official part in the Commonwealth régime.

Downing was prominent among those who pulled the strings and so worked up public feeling that the Restoration of Charles the Second in May, 1660, became an accomplished fact. A first reward was his appointment as a Teller at the Exchequer in 1661, followed in 1662 by a grant of that land on which he built Downing Street. Meanwhile he had been confirmed and reappointed in his post at The Hague, and was instructed to apply to the Dutch Government for the arrest of such of the regicides as might be found in their territory. Three—Barkston, Okey and Corbet—were discovered at Delft, and were arrested under his own personal supervision and sent to the scaffold. They were old associates and acquaintances of his own, but that did not weigh with Downing. Pepys remarked in his Diary: "Though the action is good, and of service to the King, yet he cannot with a good conscience do it"; and "All the world takes notice of him for a most ungrateful villain, for his pains."

It was this service perhaps that gained Downing his baronetcy, conferred in July of the following year.

The King now wanted war with Holland, and Downing, who had been superseded at The Hague, was reappointed, although he hated the Dutch, and they liked him no better. It was thought that with this uncompromising attitude on both sides, war certainly would result. Downing was a political agent who had no scruples, as was well known; for he frequently had boasted he often at The Hague had De Witt's pockets picked of his keys, and so secured his private State papers.

But, this time, The Hague had grown too hot to hold him, and he hurried home in fear of his life; only to be

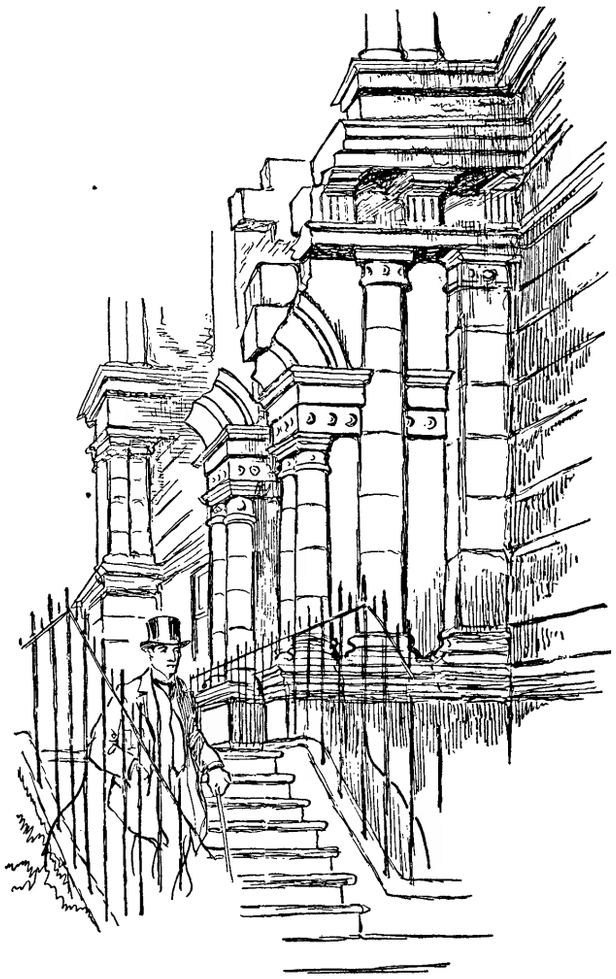


NO. 10 DOWNING STREET.

consigned to the Tower of London for quitting his post without leave. It was a short sojourn there, for he was released in little more than a month.

Soon afterwards he slid away out of public life, having, it was said, made £80,000. The Downing baronetcy became extinct in 1764.

In 1698 the street was described as one of "four or five very large and well-built houses, fit for persons of honour and quality." It was not then contemplated as a street of official residences.



THE UNFINISHED AND ABANDONED WORK OF SIR GILBERT SCOTT.

Number Ten, Downing Street and its neighbours narrowly escaped being destroyed about 1873, when it was proposed to demolish the houses, for sake of building another extension of Government offices. At that time our historic consciousness slept. To-day it is wide-awake, and there seems to be no prospect of these old houses again being threatened. There are, in point of fact, three official residences in the street, No. 11 being that of the Chancellor of the Exchequer, and the office of the Government Solicitor the next.

The dingy exteriors of all these old houses of drab and sooty brick, altogether bare of architectural adornment, are deceptive, alike as to the size of the houses or the dignity, and even beauty, of their interiors. It is not the beauty of elaboration, but of proportion and simplicity. They are well lighted rooms and lofty. The windows are large. Incidentally, those of No. 10 have perhaps been broken more often than those of any other house in London with stones, half bricks and other missiles, chiefly by the Suffragettes of 1908–10, when the hall-porter, who sits in the quaint old chair in the hall, must have had many an exciting hour.

Number Ten was in the time of James the Second the property of the Master of the Horse, Lord Lichfield. George the First conferred it upon Baron Bothman, the Hanoverian Minister, for life, and in 1732 it was selected as an official residence for Sir Robert Walpole, the First Lord of the Treasury. Since then it has ever been put to the same use.

In these rooms the ultimate and most fateful decisions have been taken. Wars have been forced upon us (for we do not seek conflicts, the greatest of British interests being peace); domestic and foreign affairs of every kind, and schemes to outwit political opponents, have all been the subject of discussion at Cabinet Councils. Ministers with loose tongues, upon whom responsibility has sat lightly, have here learned discretion. The front door is plain, with a much-worn brass plate, on which the last vestiges of the words "First Lord of the Treasury" may be read. The Council Room is on the ground floor, and is approached by an ante-room. No eavesdroppers ever have gathered early news there—although self-important and inexperienced Ministers have been known to give out palpable hints—for trusty door-keepers keep guard. On the first floor in front is the rather sombre, wainscoted dining-room, used for political dinners and banquets celebrating the birthday of the Sovereign. In the adjoining reception-room used to be given those remarkable meals, the political breakfasts favoured by some Prime Ministers, to members of their Cabinets. The old Cabinet Room, on the ground floor, at the back, looks upon the terrace and the garden. It is a large room, with five windows, but it was found too small; and Cabinet Councils now meet upstairs.

The garden fronts of these official residences are as pleasant as they are unexpected. Stone steps lead down to fresh lawns, from the inquisitive eye enclosed behind brick walls.

Number Ten being nearest to Whitehall of these three remaining houses of this historic street, it adjoins the old Treasury building, whose modern front to Whitehall conceals the real age of the block. A communication exists between the residence of the Prime Minister and the Treasury, for the range of buildings is continuous. It is pierced by the long vaulted "Treasury Passage," a public footway between Downing Street and the Horse Guards Parade. On this side may be noticed some of the alterations made by Sir Christopher Wren, and in a yet later age by Sir John Soane.

Memories innumerable cluster around Number Ten, Downing Street. Every type of Minister has entered there, and most Prime Ministers have resided there. Not Lord Salisbury, for he had his own residence in Arlington Street, and he preferred to hold his Cabinet Councils in the Foreign Office. I like to think of Sir Robert Walpole here, thinking not only that "every man had his price," but wondering what was that price at which certain men could be bought, or of Queen Victoria's gay first Prime Minister, Lord Melbourne, with his ready wit and apparent, but not real, indifference.

"I think," said a pedantic colleague, "that *cæteris paribus*, I would offer So-and-So the post."

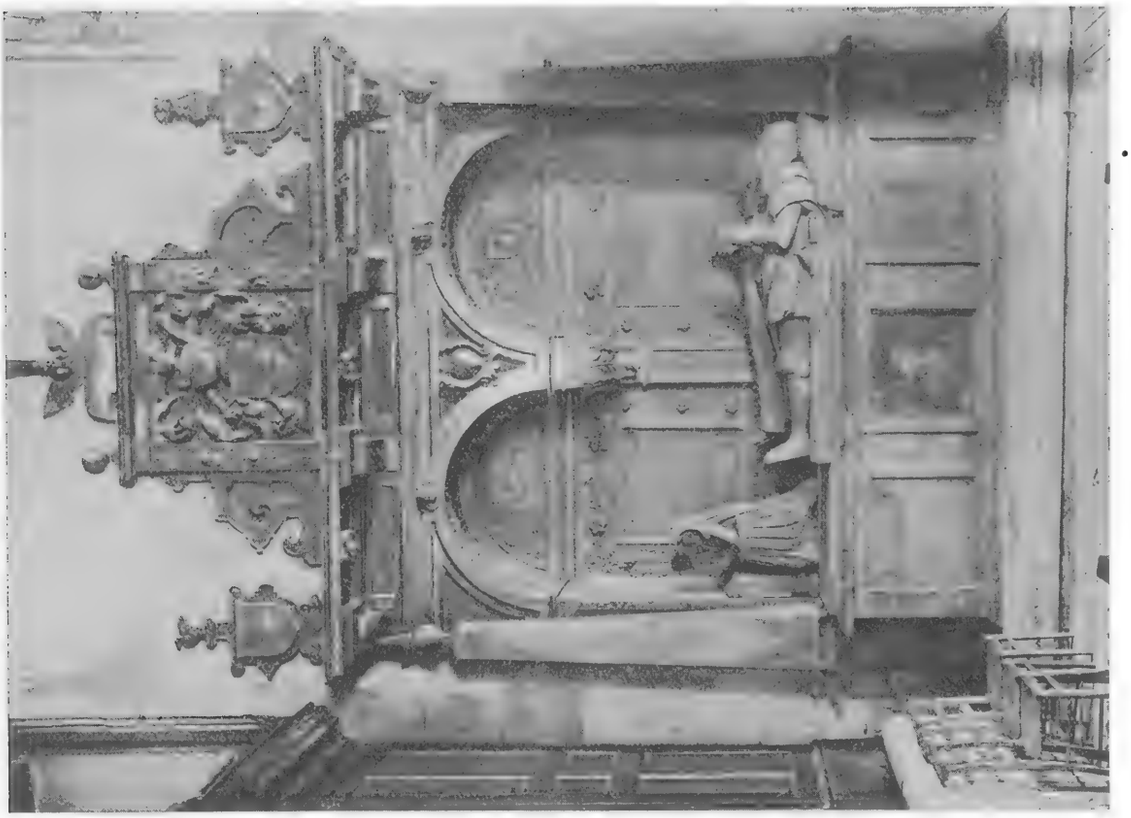
"I agree," replied Melbourne, "but *cæteris paribus* be damned!"

And to another, who complained that a Minister had "damned the Bill, damned the Government, damned the House, and damned me." "Well," asked the Prime Minister, "what more could he do?"

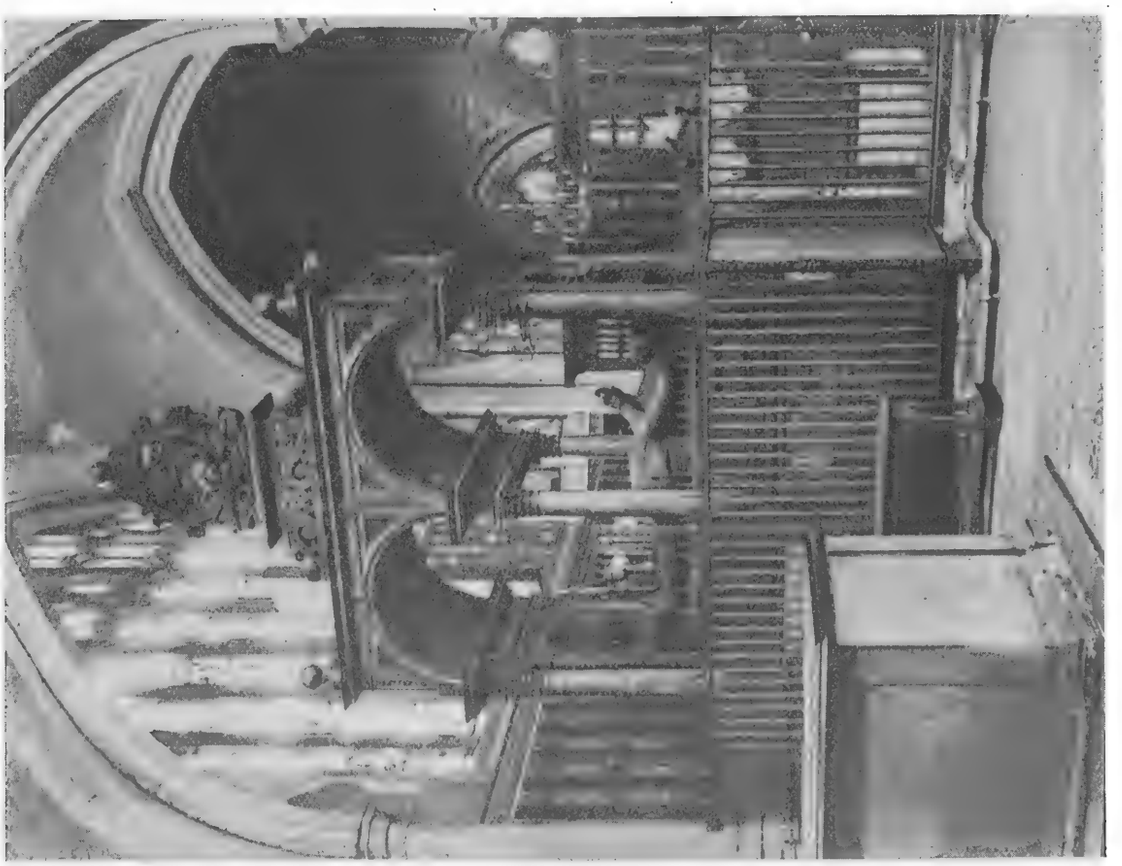
A curious and unnoticed feature of Downing Street, as you go down the twenty-two steps to the Horse Guards Parade, is the unfinished masonry on the left, a part of the Home Office and Colonial Office block of Government buildings, the work of Sir Gilbert Scott. The competition for the work was issued in 1856, and so many were the delays and the controversies that the buildings were not completed until 1873. It was at that time intended to demolish all the buildings on the other side of the street, and to build there another large block of Government offices, but wiser counsels prevailed. The only relic of this abandoned project is the naked brickwork, which, with the rough ashlar and the springing of the arches that were to have supported a passage over the street between the two blocks, remains to show how unexpectedly Governments can change their plans.

Among other of the fine work executed in Liverpool Cathedral are the choir stalls which were presented by Samuel James, Lord Waring and Eleanor his wife in memory of Lord Waring's parents, Samuel James Waring, his wife and only son. These stalls, which are beautifuly executed examples of woodwork richly carved, were executed by Messrs. Waring & Gillows, Ltd., of Bold Street, Liverpool, and are outstanding features of the great building in which they are placed.

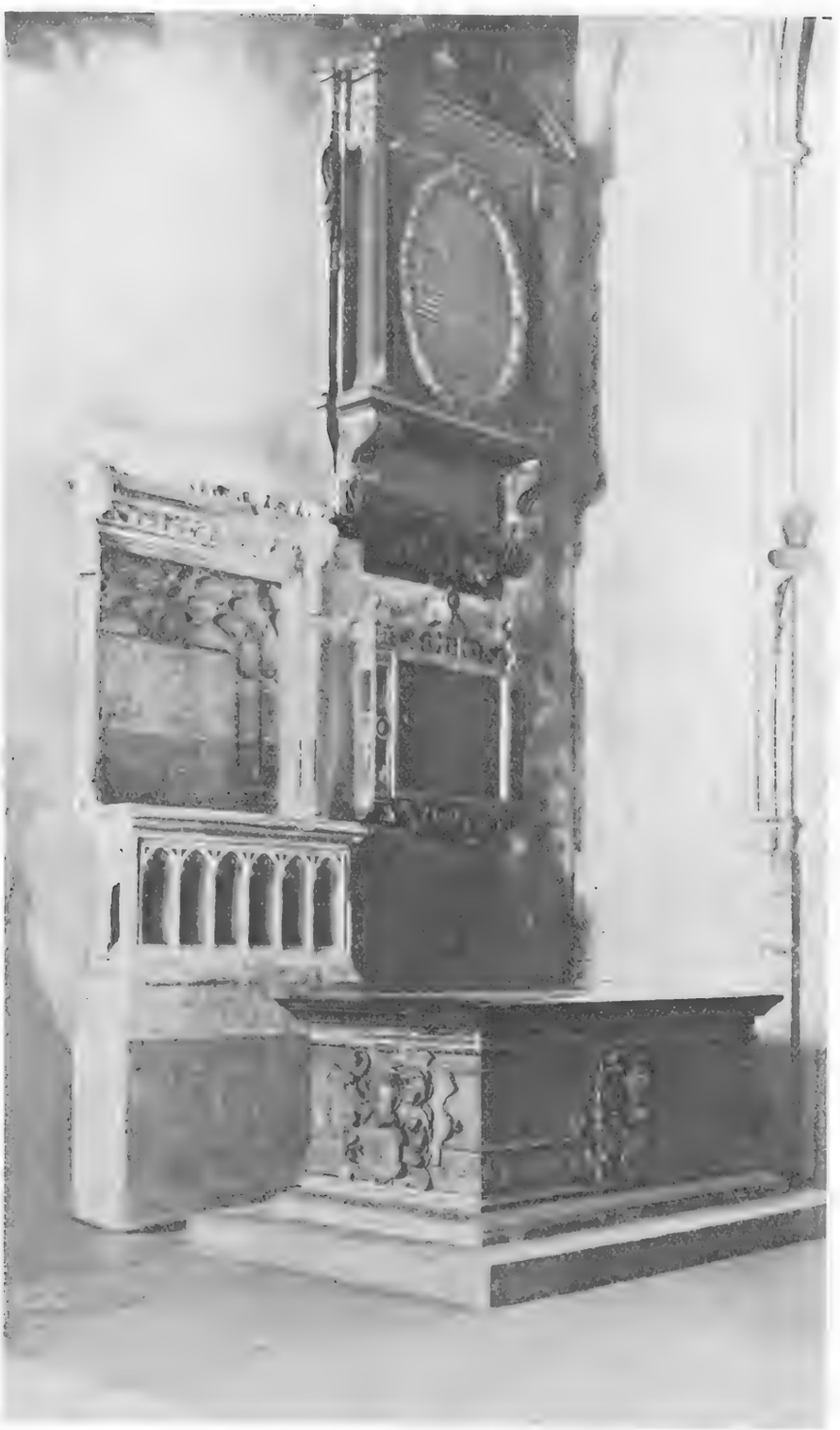
Boyle's latest Patent "Air-Pump" Ventilator has been applied to the Poor Law Institution, Merthyr Tydfil. Supplied by Messrs. Robert Boyle & Son, ventilating engineers, Holborn Viaduct, London.



SIR JOHN SPENCER, 1609, ST. HELEN'S, BISHOPSGATE.
(From Vol. IX. of the Survey of London.)



THE PICKERING MONUMENT, ST. HELEN'S, BISHOPSGATE.
(From Vol. IX. of the Survey of London.)



MONUMENT IN N.E. CORNER OF THE NUNS' QUIRE, ST. HELEN'S, BISHOPSGATE.
(From Vol. IX. of the Survey of London.)

Book Reviews.

Volume IX. of the Survey of London: St. Helen's, Bishopsgate (Part I).

This very interesting volume gives a great wealth of detailed information respecting one of the oldest churches of London, which fortunately escaped the Great Fire. There is evidence that a church existed on or near the present site in the twelfth century, but it seems to have been entirely removed about the time the later Priory was built. The reconstruction took place in the early years of the thirteenth century, when the nuns' quire was erected, and this was followed by the parish nave, chancel and south transept. Two chapels, those of the Holy Ghost and St. Mary, east of the south transept, were probably erected before 1363. The nuns' church and the remainder of the Priory buildings were granted after the Dissolution to Sir Richard Williams in 1542, and in the following year came into the possession of the Leathersellers' Company. The church was repaired in 1632. The church to-day remains an interesting record of different centuries, with an unusually fine collection of interesting mural monuments, the greater proportion of which are of post Gothic character. The south door of early Renaissance character, dated 1633, is a very characteristic example of Jacobean design reflected in the elaborate inner door carving.

(Survey of London, Vol. IX, St. Helen's, Bishopsgate, issued under the General Editorship of Sir James Bird, for the Council, and Philip Norman, for the Survey Committee; published by B. T. Batsford, Ltd., £2 2s. net.)

"Masters of Architecture: McKim, Mead and White." By C. H. Reilly, and "Fischer von Erlach," by H. V. Lanchester. London: Ernest Benn, Ltd., 8 Bouverie Street, E.C. Each volume 10s. 6d. net.

Professor Reilly has written a most admirable review of the work and influence of the great American firm whose reputation in the realm of architecture will endure with that of the greatest men of the past. We can say from our own knowledge and from

intercourse with McKim that what Professor Reilly says about his methods of work is absolutely true. McKim was one of those rare men who, while appearing to leave much to others, always secured the results which satisfied his critical judgment. Of the three partners Stanford White alone seemed to spend time at the drawing board, but there can be little doubt that McKim controlled the firm's efforts to a greater extent than Stanford White. He was the prototype of Howell's architect in the "Rise and Fall of Silas Lapham," who was described as knowing far better what a woman wanted in a kitchen than she did herself, and the general impression he gave everyone was that of an extraordinarily highly cultivated connoisseur whose intimate knowledge had never eliminated his kindly human sympathies. When he came to England to receive the R.I.B.A. Gold Medal we asked him for his impressions and after this lapse of time they may be stated. He said: "It seems ungracious to criticise after one has been almost killed with kindness, but can you tell me how it is that living practically under the shadow of the dome of St. Paul's as you do, there is so little feeling here for your own fine traditions." That sentence summarised McKim's feelings. He would, had he been an Englishman, have been the last man to design in England what he designed for America, a country in which it was necessary to make traditions. He founded American tradition, because it was non-existent; he would have followed English tradition with reverence for its long past history. The illustrations of this volume are excellent, but it is somewhat odd to us that Professor Reilly did not include in the volume illustrations of the New York Municipal Buildings, which, designed after McKim's death, perhaps better than anything else show the enduring influence of his life and works.

But of one fact we are sure, which is that were he in our midst to-day the work he would most commend is not that which follows at a distance the American lead, but the work of Newton, Brydon and Field, in which the influence of our own great traditions is most clearly evidenced.

Fischer von Erlach.

This most interesting and useful volume gives a good account of the works of a great master of the Baroque whose work has had a wide influence on the history of Austrian design, and exemplifies a mode of expression which, save for the works of Rickards, has found almost no echo in English architecture. The illustrations prove that abundant fancy and freedom is perfectly compatible with dignity or expression and simplicity and directness of aim.

The Architectural Ghost.

In an article entitled "The Anonymous Architect," by Egerton Swartwout, published in the July issue of "Architecture," Mr. Swartwout informs us of the conditions prevailing in America in respect to a type of architect known here by the appellation of "The Ghost." However bad our conditions may be, those described by Mr. Swartwout as prevailing in his country appear to be considerably worse. Before referring directly to the article mentioned it might be as well to examine the question from a different aspect. Is the architect-employer expected to design everything? Because, if so, the architectural schools would do well to educate individuals who will be able to demand a good salary by virtue of their exceptional ability as mechanical draughtsmen rather than their having the design faculty highly cultivated. If, on the other hand, the architect-employer may, consistent with his dignity and position as the principal, request his assistant to do some of the designing, the question that arises is: When is the assistant merely an assistant and when does he arrive at the stage of being a ghost?

Most assistants, as they show their ability and gain the confidence of their principals, are inclined to chafe at the position of affairs that gradually develops them into ghosts. But if they would only recognise architecture as a business, they would realise the whole situation far better. A medical man has been known to sell his practice. An architect's connection is worth a certain amount of money. And it seems a little unreasonable to expect the architect-employer to pay a good salary and a share of the profits to an assistant who is unable to invest any capital in the business. An architect's connection is not built up entirely by sitting in front of a drawing-board and designing well-planned buildings. The architect-employer has to find the regular flow of business which will enable him to pay his assistant the salary he receives for services rendered. If the search for clients increases and forces the architect-employer to pass most of his time away from the drawing office, assistants need not of a necessity conclude that the principal has lost the power to design or draw.

It is impossible to eliminate the business side from a successful architect's practice. The principal has either to devote his energy to securing a steady flow of professional work or he must remain in the drawing office and employ somebody to secure the clients. He mostly elects to become the business man. Common sense forces this choice sooner or later upon him. The assistant in the drawing office might, with considerable benefit to himself and his employer, reflect on the hardship of being obliged to become commercial instead of sitting in front of a drawing-board and enjoying all the pleasures of architectural designing. There is another very important consideration, which is often overlooked by the architectural assistant. He receives a salary for services rendered. With the payment of the agreed salary the employer's obligations, moral or otherwise, are settled. If you buy a hat and expect it to last twelve months and it lasts eighteen months, nobody expects you to return to the hatter and give him a bonus. If you employ an assistant, you naturally expect to derive some tangible profit from his work.

Assistants should reflect on the reasons why they themselves are not principals. These generally can be classified under the following headings: (1) A desire to gain experience, (2) and an inability to support oneself during the period of time devoted to building up a connection. Here in England very few start their professional life with a fixed intention of remaining an assistant. Most look upon such a position as a temporary arrangement, hoping that circumstances will arise that will enable them to launch out for themselves. They are, in short, all slowly building up a connection, which it is quite natural, when they have secured the same, they should value at a fixed sum of money and be unwilling to share with some younger man whose services can be compensated by means of a salary settlement. There are only two ways of becoming a principal, and these are by years of hard work and study, or by means of a capital investment, supported by architectural ability. We have here very few men who devote their entire lives to perspective work, and amongst the younger men none can be recalled who are not architects in practice. In many cases they are not responsible for the design, but its presentation is greatly influenced by their architectural knowledge, augmented by their ability as pen, pencil, or water-colour artists. Much amusement and truth is contained in Mr. Swartwout's article. The author does not see architecture as a business, but as a profession, and a very personal profession.

"An architect is not merely a pleasant gentleman with some artistic proclivities and a few influential friends. He is, or should be, an artist endowed by nature with imagination, common sense, and with that almost undefinable attribute which in default of a better term we may call constructive ability; that peculiar faculty by which he would know instinctively, and not by being taught, that two and two make four and not five; that same faculty that enables a man to put one word after another and produce intelligible English, or to brief a case if he is a lawyer, or diagnose one if he is a doctor. If a man has that, and with it imagination and artistic feeling, he can become a designer, an architect, and if, in addition, he has common sense and a touch of humour, he may become a good architect, and if fortune favours him a great one. Without this constructive ability he is nothing."

In this country it is difficult to call to mind any instance where "Sharp, keen men, good salesmen, men who would have made a great success at making tin tacks or automobiles, and who, under other circumstances, might have become captains of industry," have ever started an architectural office as the principal business of life, and have employed "salaried designers" as they might employ stenographers. Frequently large, well-established business enterprises have created architectural offices as a department of their organisation, and have employed professional men to control and produce the necessary designs and drawings. But here the profits of an architectural practice have never been sufficiently attractive to induce men of finance to run architectural establishments as a purely business investment, though such offices are very successfully run in a subsidiary capacity.

ARKSEY.—Accommodation for 300 children is to be provided at a cost of £7,000 to replace existing premises.

STRETFORD.—The Urban District Council are to reconstruct Stretland Road at a cost of £5,350..—A scheme has been adopted for diverting the river Mersey at a cost of £4,650.—The Council are to borrow £20,000 for subsidies for 200 houses.—Fifty warehouses are to be erected on the Seymour Grove site. Plans passed: eight houses, Talbot Road, for Messrs. Geo. H. Brow and Son; two houses, Edge Lane, for Mr. Arthur G. Langshaw; eight houses, Gorse Lane, for Messrs. Geo. H. Brown and Son; shop, Moss Road, for Manchester and Salford Equitable Co-operative Society, Ltd.; additions to works, off Warwick Road North, for Messrs. W. T. Glover and Co., Ltd.; watchman's dwelling, Longford Bridge, for Messrs. Rathbone Bros.; motor spirit depot, Trafford Park, for the National Benzole Co., Ltd.; additions, Stretford High School for Girls (Heath House), for the Lancashire Education Committee.

Outspoken Letters of a Young Architect.—II.

———— Kent.
———— 1923.

DEAR E——,

Here is another point on which I must again trouble you for advice. About four miles from here there is an estate which a certain syndicate is about to develop. The said syndicate, knowing I am a local and qualified architect (but at the same time one who is anxious to get any work that is going) apparently wish to exploit me for their own ends. They have propounded a scheme which I fear the R.I.B.A. rules would not permit me to touch. I don't want to lose an opportunity of doing their work, for if I do, someone else, even an Institute man, would readily take my place. The following is a copy of a letter I have just received :—

Park Hill Estate.

" DEAR SIR,

" We have seen your name in the list of local architects, and note that you are an Associate of the Royal Institute of British Architects, and we wish to approach you with regard to the development of some 50 acres of land known as the Park Hill Estate. You may possibly have heard of this proposed development, which is being undertaken by our syndicate. We are in need of the services of a professional man, but at the present moment are not in a position to employ you on the design and lay-out of our scheme, as Messrs. Jones & Jones have this work in hand. The above-mentioned contractors have already prepared the plans for various types of houses to be erected on our estate, but we do wish you to act for our syndicate in the capacity of a house agent. Furthermore, we should like to place your name and qualifications on our hoardings. If you are willing, we should wish you to interview prospective purchasers at your office and give them information concerning the scheme as a whole and the types of houses in particular, as no doubt from your technical experience you would be able to bring to their notice the various architectural advantages of our houses and bungalows. Should you be able to secure an order for any portion of our land or the buildings erected thereon, we should, of course, be willing to pay you a commission on terms mutually agreeable. Later on, when we have sold a sufficient number of houses, we propose to hold a meeting of as many of the owners as possible, and place before them a scheme for the erection of a clubhouse, assembly room and concert hall. We should be glad, when the time comes, for you to prepare designs of these buildings. If matters are concluded as anticipated, there will doubtless be other works that will follow in which we shall need your co-operation. Messrs. Jones & Jones have a number of plans which you may inspect any time you wish, and from which you will see that the cost of erection has been reduced to a minimum owing to standardisation and other economical measures.

" Awaiting the favour of your reply,
" We beg to remain,
" Yours faithfully,
" ————."

Of course, it all sounds very unprofessional, and I quite realise that they wish to make use of my qualifications for their own purposes. Furthermore, I have seen the contractors' plans, which cannot readily be beaten for sheer gimcrack methods of jerry-building, and, needless to say, they are some of the ugliest designs that it has been my lot to behold.

My first inclination was to refuse to have anything to do with the scheme, because one cannot be an architect and a house agent at the same time, but it struck me that, if I refused the commission that they would offer for the sale of the houses, I might still get the syndicate to agree to my having the general supervision of their work. Then comes this point—supposing, for example, a prospective purchaser comes to my office as a result of their advertising and wishes to see the plans, in all probability he would fight shy of the houses they propose building, and ask me to build one according to his wishes, or modify and adapt the existing plans of the contractors. The difficulty here is that Messrs. Jones & Jones have prepared to standardized types of houses which are to be erected piecemeal with no alterations. What is my position if the prospective purchaser then says, " I don't want any of these houses, nor do I want to live within sight of them, but I am ready to give you the job of building an entirely new house on some other land " ? Can I, in all fairness, do this for him when he is really a client of the syndicate, and has only come my way through the accident of their own publicity campaign ?

I trust that, one day, when we have obtained registration, we shall be free to do more as we like, as by that time the public may possibly realise that the word " Architect " after our names stands for a qualified man and not a combination of monumental mason, auctioneer and general quack.

With regard to other matters then . . . etc.

Believe me,
Ever yours sincerely,
B————.

———— Surrey.
———— 1923.

MY DEAR B——,

I was very much interested in your last letter and the points you raised. They have given me considerable food for reflection, but there is no doubt on one or two of the questions at issue.

It seems to me that this syndicate, if properly handled, may be of great use to you, but you will have to use your authority, and let them know that you are an architect who cannot be made into a mere plaything.

To start with, you must not have your name on the hoardings. The etiquette of the profession and the instructions of the R.I.B.A. are definite on that point. Furthermore, you cannot, in all honesty, represent yourself to be the architect of houses whose plans and designs belong entirely to others, such as Messrs. Jones & Jones.

You can, however, indicate to your clients that you will be willing to act in an advisory capacity and supervise the general lay-out of their estate and the erections of the buildings. I should suggest to them that there will probably be many people who would like to erect their own houses (Messrs. Jones & Jones will certainly not object to this if they are employed), and your syndicate will be able to sell many more plots and houses if their purchasers are allowed to have a certain say in the matter of their accommodation; in fact, this is usually the case, and nearly always done in practice.

In order that the scheme may present a homogeneous whole, your syndicate must give you powers to control the design of any buildings that will be put up, and in that way the clients will get their own type of house, the contractors will get the work, and the syndicate will sell their land and make their profits.

If, however, a case such as you refer to does arise, in which a purchaser finds that he does not like the neighbourhood, and asks you to build him a house, there is no earthly reason why you should not accept the job, even though it comes to you through the results of the syndicate's advertising; but, to be quite fair, I should lay the matter before the syndicate, and tell them that your man wants you to build a house for him elsewhere. If they object, you would probably have to let the client go or resign your position. It is possible, however, that it may be worth your while to resign, inasmuch as your position as a domestic architect will have been established, and that private individuals will come to you to get what they want in preference to being bound to the standard type of house that Messrs. Jones & Jones would set up. . . .

Ever your old friend,
E————.

CARLISLE.—Plans have been prepared by the surveyor for the widening and improvement of Caldew Bridge at an estimated cost of £40,000.—Plans have been approved for the widening and improvement of St. Nicholas Bridge at a cost of £68,500.

Vestiges of Pre-Buddhist Architecture in India.

By Cyril G. E. Bunt.

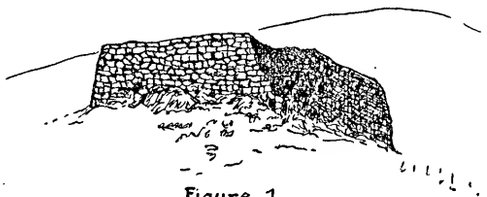
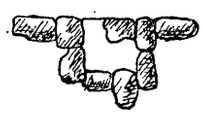


Figure 1.
Pippala Stone House
Rājagrihā.



Plan of a cell.
Figure 2

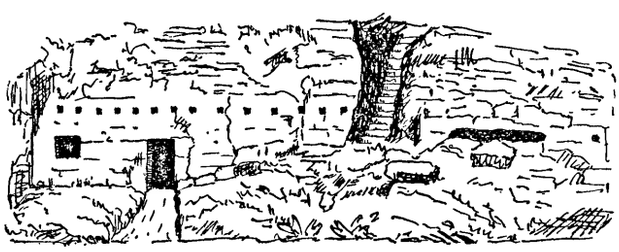


Figure 3. Sonbhāndar Cave,
Rājagrihā

It is customary to look upon the Aryan invasion, which took place *circa* B.C. 2000, as solving the whole question of origins for the civilisation of India and its arts. It is, either by inference or direct statement, postulated that the Aryan (Indo-European) race was at that time highly civilised, with a thorough knowledge of architecture, among other things. To say the least, this is doubtful. There is reason to believe that the invaders were somewhat low in the cultural scale when they first arrived; and that it was the vigour imparted by the conflict with, and absorption of, the autochthones which later bore fruit of such wonderful richness.

Advocates of the high culture-status of the Aryans bring forward to support their case the fact that in the Rig-Veda descriptions of buildings and towns are frequent. But in reality this argument gives no support to that view, for the Rig-Veda was composed somewhere about B.C. 1500, and grew into its present form in the fourteenth and thirteenth centuries B.C. This allows a period long enough after their first incursion to account for infinite expansion in all ways. Romesh Chunder Dutt truly remarks, "It was impossible in the nature of things that hymns like those of the Rig-Veda should be composed after the Hindus had achieved the elaborated civilisation and adopted the pompous religious rites of the Epic Period."

Whence came, we may well ask, those "pompous rites," whose rituals doubtless included something more than libations at the sacrificial fire of the family hearth. In the Rig-Veda there is no mention of temples, and without temples there would be less Indian architecture than there would be European without the story of the churches. Yet in the Mahābhāratā and the Rāmayana, both originally composed about the period when the Rig-Veda assumed its final form, we get mention of temples, many storied buildings, boundary walls, steps in tanks, etc., showing clearly the occasional use of stone-work.

It is significant that the change from the Vedic religion to the rationalistic views—which ultimately reached florescence in Buddhism—came about at the period when the Indo-Aryans, crossing the Vindhya hills, conquered portions of Southern India. The non-Aryan southerners were of Dravidian stock.

Among the non-Aryan peoples architecture held a considerable place even in Vedic times. The towns destroyed by Indra's vengeance, although considered to be cities of the clouds, must yet have had their prototypes on earth. Hundreds of "castles" (probably walled forts) are referred to as being destroyed, and in one instance while ninety-nine towns are devastated one is left for the abode of an *earthly* prince. In one passage the towns of Sambara are stated to have been of stone, in another they are described as "the plastered," hinting at the employment of lime or stucco.

From this, it is true, we may deduce little enough of the architecture of pre-Buddhist times. We establish, however, the important probability that Indian architecture was not an importation, but an indigenous growth. Bearing in mind that even at this day much Indian building is indescribable as architecture, we can well understand that in early times whole towns were of this nature. Practically all the architecture of this early period was entirely perishable. The titles of Visvakarma (the non-Aryan Maya)—"Lord of the Arts, Carpenter of the Gods"—sufficiently indicates that wood played an almost exclusive part in construction. And this Maya, according to the Mahābhāratā, built the palace of the Pandavas—a myth which perhaps alludes to the adoption by the Indo-Aryans of the native style, or at least the employment of an architect of the conquered race.

Sufficient has been said to show that we can scarcely hope to find existing to-day relics of this extremely early period. At the same time we can gleam something from a most interesting group of remains discovered on the site of Old Rājagrihā. These ruins, overgrown with jungle and almost obliterated, are undoubtedly the oldest yet recognised in India.

When, six hundred years before Christ, the kingdom of Magadha was approaching the zenith of its greatness Rājagrihā was its capital. Here was the palace of Bimbisāra, and hither came Gautama Buddha, after forsaking his home and Yasōdharā, to become a student and a homeless wanderer.

On this historic site have been discovered vestiges of architecture which prove that, at least in this capital town, stone was certainly used in building construction. There are the old walls, watch towers, a causeway and other ruins which lead us to infer that as yet they employed undressed stone and used neither mortar nor cement to join them. There are no signs of any decorative refinements, and we feel justified in concluding that we are yet dealing with an epoch before they had begun to translate into permanent stone the features of their wooden structures.

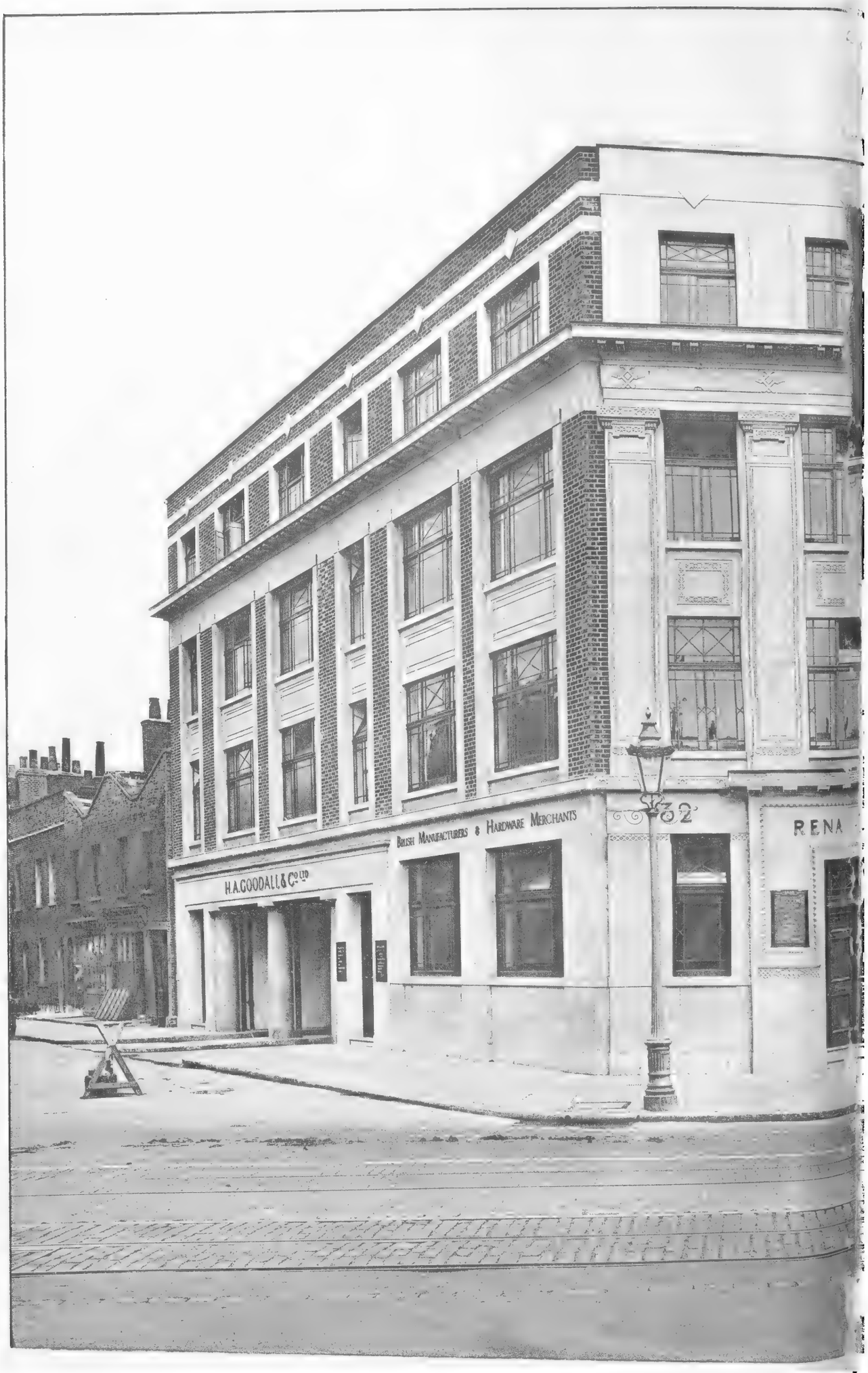
The term cyclopean is perhaps the most appropriate to apply to the masonry of these remains, all of which are in date at least coeval with King Bimbisāra. The walls, which, at least in places, reached an elevation of 11 or 12 feet, were built with a casing of stones from 3 to 5 feet in length, with a core of smaller stones and rubble. In thickness they varied from 14 to 17 feet at the base and were finished off at the top by a course of smaller stones. At intervals there were rectangular bastions, of similar construction, with a slight batter, furnished with ramps built in the thickness of their inner faces.

The watch towers set upon favourable elevations were all of one type. One still stands and has been identified as the Pippala Stone House described by the Chinese pilgrims Fa Hieu (A.D. 400) and Houen Tsang (A.D. 629–645). Popularly known as Jarāsandha-ka-Baithak—the Throne of Jarāsandha—this is a crumbling platform about 85 feet square and perhaps 20 feet high, diminishing as it rises (Fig. 1). In the sides are small cells, roughly 6½ by 3½ feet, with narrow openings about 3 feet high. On plan these are as shown in Fig. 2 and were apparently intended originally

"INK-PHOTO" WM BROWN & CO. LTD. LONDON, E.C.3.

MAIN ENTRANCE TO RENA HOUSE.

EUGÉNE C. BEAUMONT & SON, ARCHITECTS.



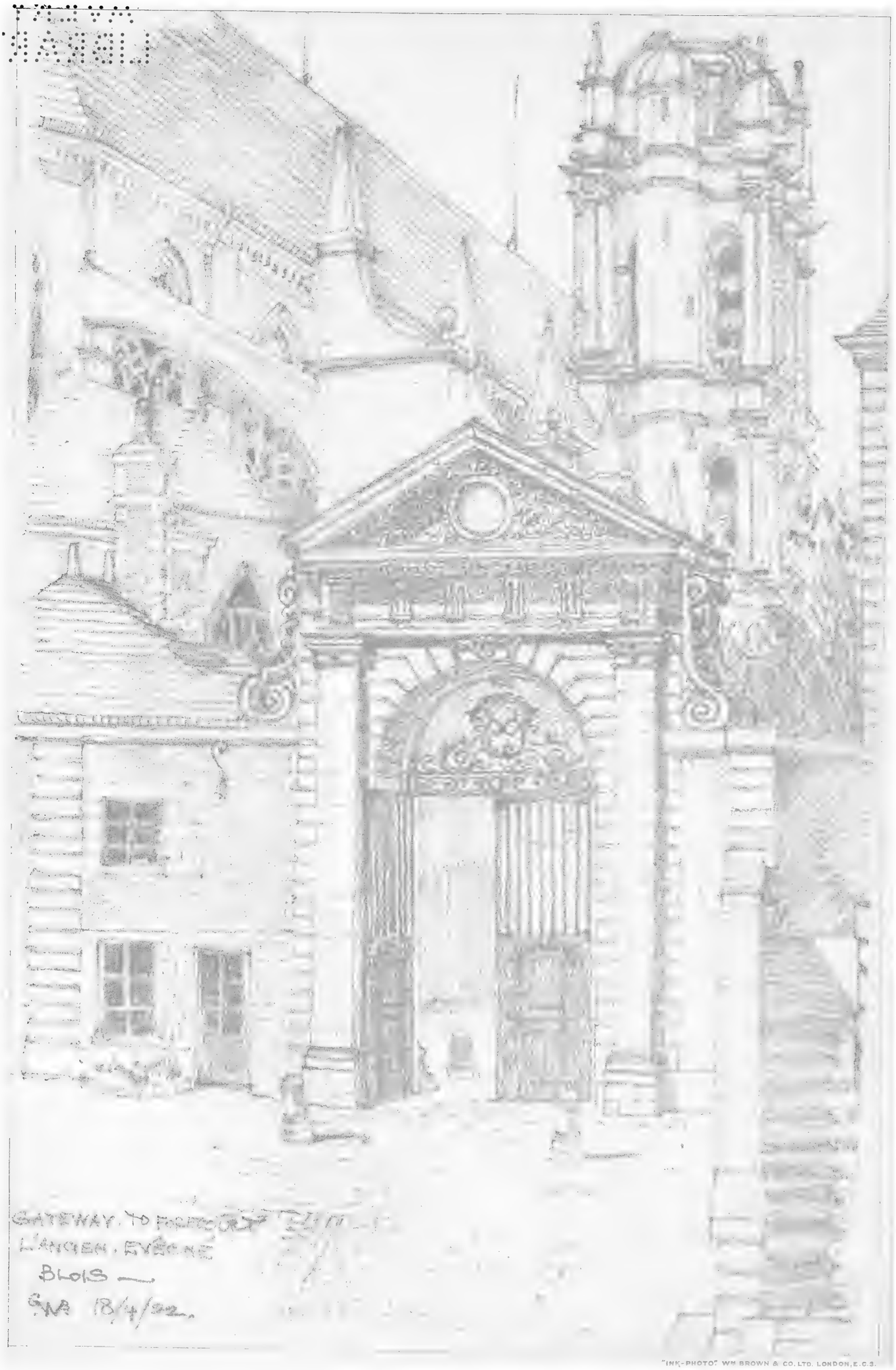
RENA HOUSE, VAUXH

EUGÉNE C. BEAUMONT

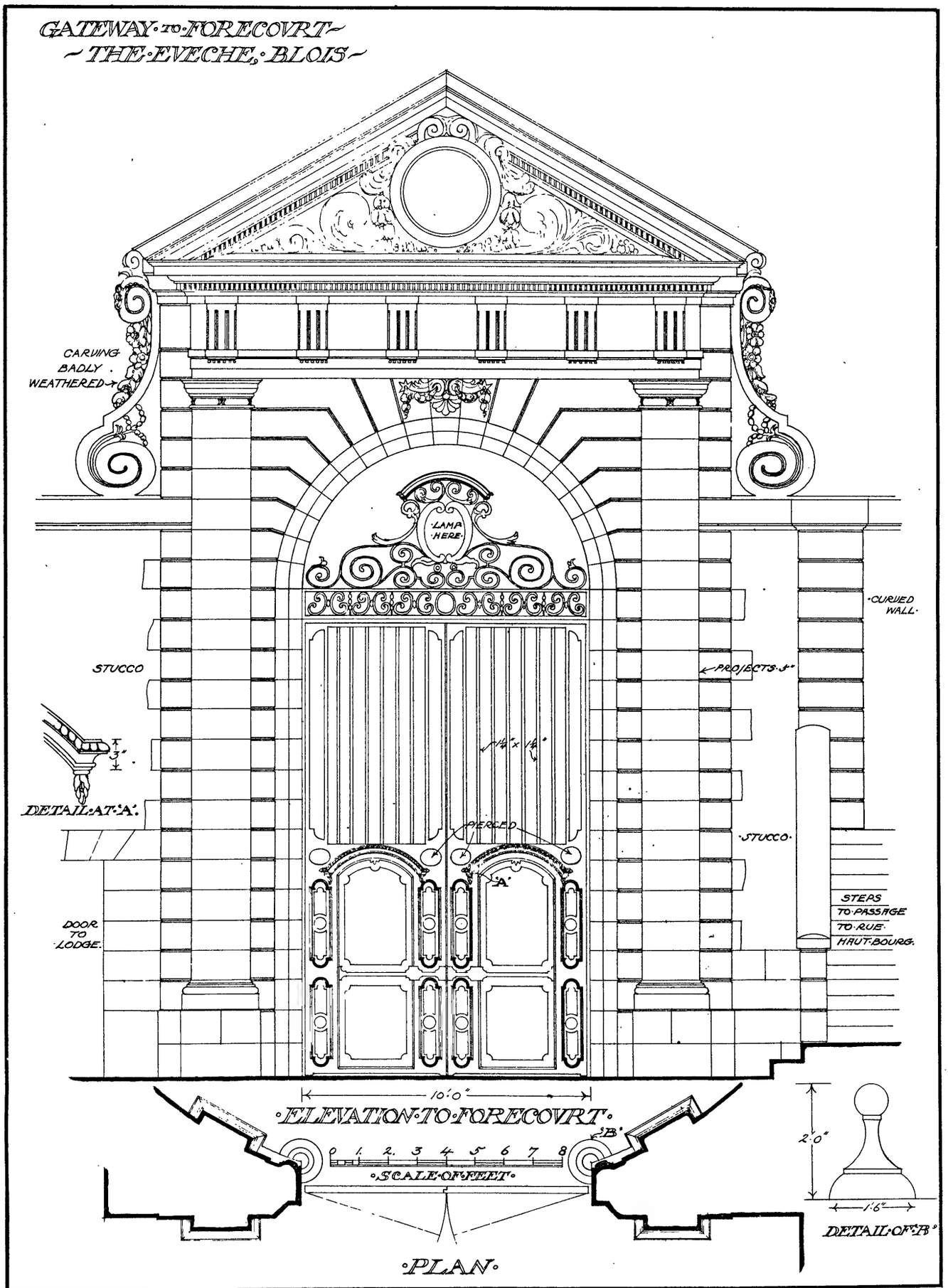
"INK-PHOTO" Wm BROWN & CO. LTD. LONDON, E.C.3.

ALL BRIDGE ROAD.

& SON ARCHITECTS.

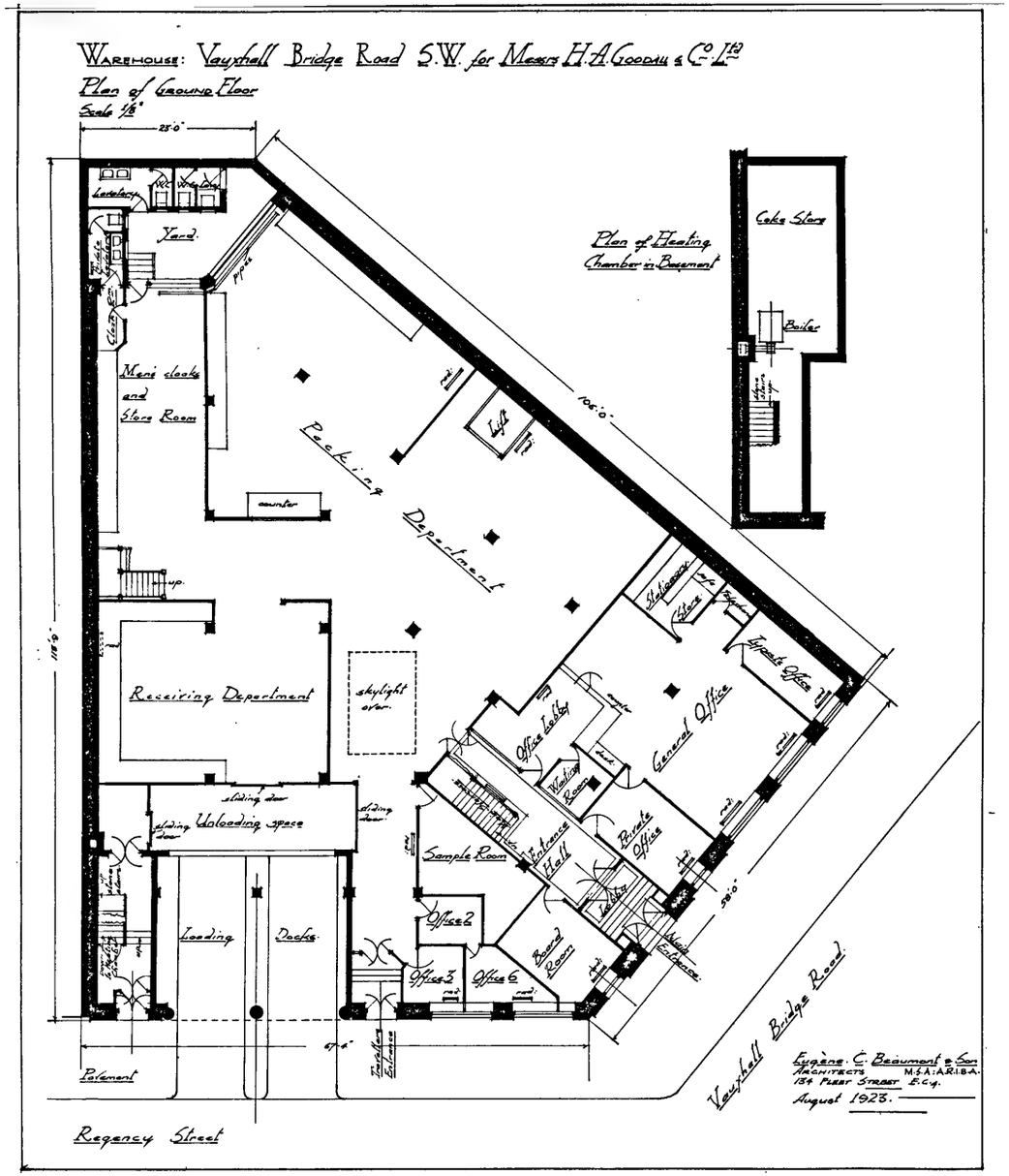


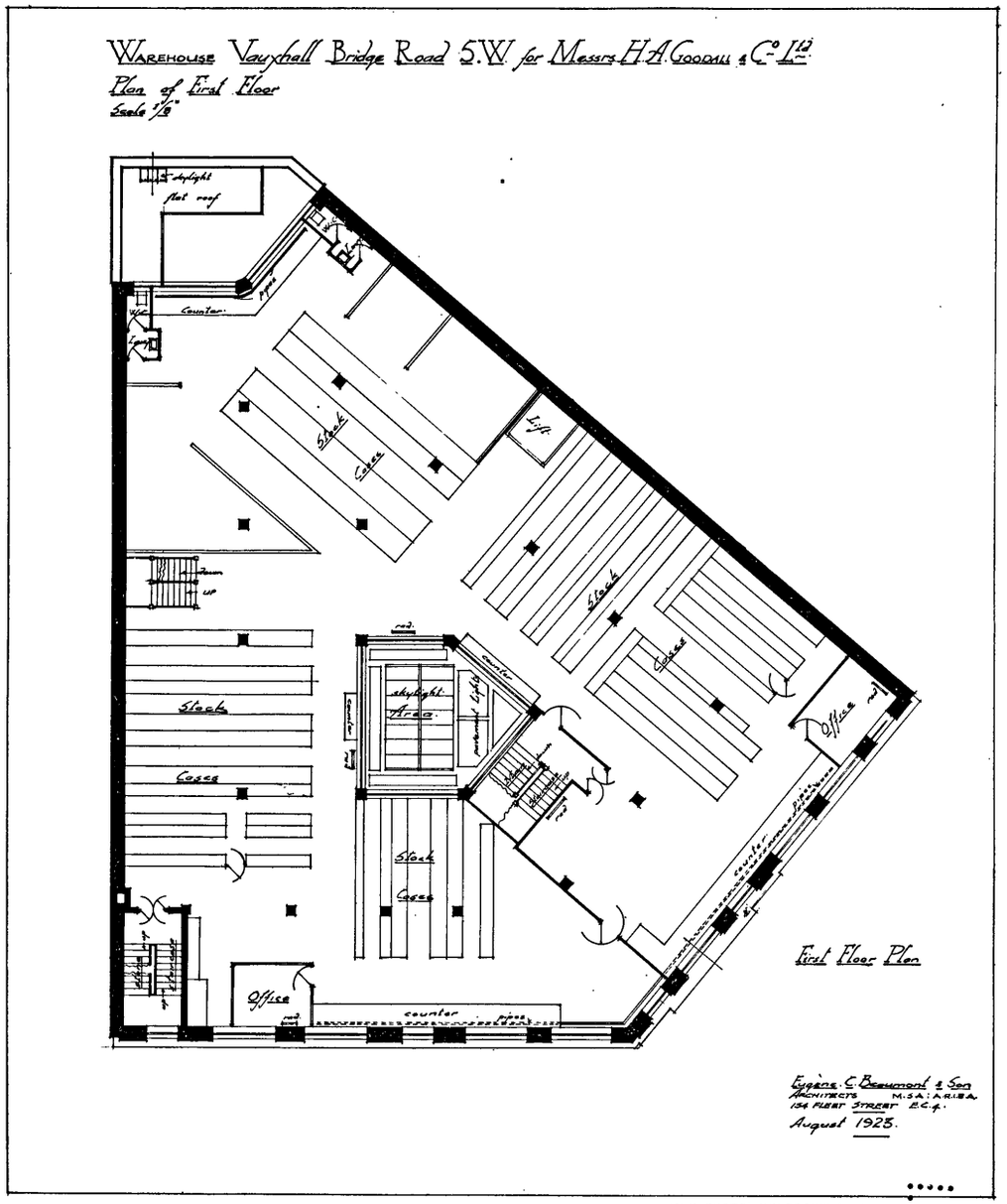
SKETCH OF GATEWAY TO FORECOURT, L'ANCIEN EVÊCHE, BLOIS.



GATEWAY TO FORECOURT. L'ANCIEN, EVÊCHÉ, BLOIS.

MEASURED AND DRAWN BY G. BERKELEY WILLS. A.R.I.B.A.





INK-PHOTO: WM BROWN & CO. LTD LONDON

GROUND AND FIRST FLOOR PLANS OF RENA HOUSE.

EUGÉNE C.. BEAUMONT & SON, ARCHITECTS.

as shelters for the guards. In later times they have afforded conveneint shelter for ascetics—Yogin and so forth.

This rough building, whose stones were laid in place some 2,500 years ago, has no pretensions to architectural merit. But its historic interest is unique, for it was here that Buddha was wont regularly to sit in meditation what time he lived at Rājagrihā. Other of the cyclopean remains include a stone causeway, from 20 to 24 feet in width, crossing the ravine at the foot of Chhathā-giri.

Of the palace and other domestic buildings of the town we glean practically no information. We have of this period only a series of foundations and just one cell 6 feet square. It is composed of bricks whose dimensions are 11 by 8 by 2½ inches. That brickwork was commonly in use at this early period except for foundations is perhaps doubtful. We learn that, in the reign of Ajātasatru, Gautama visited Pātaliputra, then a mere village, where a fortress was being built, and afterwards went to Nadika, where he rested in the "brickhall"—a resting place for travellers two stories high. Hence we may conclude that brickwork was sufficiently uncommon to make the name "brickhall" distinctive. Nevertheless, somewhat later we find brickwork extensively used in mass construction. The great Topes at Sanchi and Sarnath are examples, while excavations in 1876 at Pātaliputra (Patnā) revealed a long brick wall 12 or 15 feet below the surface, thought to have been part of the original defences. Parallel to it was found a line of pallisades of strong timbers inclined towards the wall.

It is tantalising to think how much of early Indian architecture has inevitably perished in the course of ages. In this same Pātaliputra, for instance, even so late as A.D. 400 there were ruins still existing and a tradition of its former splendour. Fa Hieu, who travelled through India at that time, tells us: "In the city (Pātaliputra) is the royal palace, the different parts of which he (Asōka) commissioned the genii to construct by piling up the stones. The walls, doorways and the sculptured designs are no human work." The remains of a pillared hall which have been unearthed here are probably all that remains of this wonderful palace.

But Asōka and his works belong to the Buddhist period and have no claim upon our attention in the present article. In conclusion we will notice just one more relic of pre-Buddhist age—Sonbhāndar Cave at Rājagrihā (Fig. 3). This, "The cave of the Buddhists," was for long considered to be identical with the Satapani cave—the scene of the first synod three months after Buddha's death (477 B.C.). The Cinhalese chronicles tell us that a splendid hall was built for this assembly, and Cunningham thought that the row of holes seen in the face of the cave was where the beams of this hall had been fixed. Doubtless a verandah of sorts once existed here, but it has been shown that the Satapani Hall was elsewhere.

Nevertheless, this primitive cave is remarkable in having a semicircular vault. It may be considered historically as one of the earliest of a series which includes such wonderful rock-cut temples as Ajanta, Kārli, Nāsik, etc. It is devoid of all decoration, for it dates from before the great temple-cutting epoch. The famous *chaityas* were all the result of the spread of the religion of Buddha, and a thousand years separates this humble cave from the crowning glory of rock-hewn temples—the Kailasa at Ellura.

One feels almost bound to apologise for the paucity of material undoubtedly of pre-Buddhist age that can be mentioned. But there is enormous scope for further discovery in the as yet little-worked field of peninsular India. At least some of the great temples whose dates we know are, the writer feels convinced, built round a nucleus whose antiquity may be almost prehistoric. So much attention is given to the ornate casket, so to speak, of later centuries that the jewel within is forgotten. Whether this is indeed the case remains to be seen, but there is an ever-present possibility that, with more research, South Indian buildings may provide strong proof of our contention—that India owes practically nothing in her architectural art to outside influence. It is from the first purely Indian.

Cardiff at Wembley.

Cardiff will occupy the Civic Hall at the British Empire Exhibition from July 21 to 30 inclusive.

It will be Cardiff's purpose to portray the interests of the city, both from the historical point of view and from that of modern municipal enterprise, and it will demonstrate to Dominion, Colonial and foreign visitors the immense facilities Cardiff has to offer as a commercial city and a great port.

There will be displayed in the Civic Hall a great oil-painting, measuring 40 ft. by 10 ft., showing the City Hall, Law Courts, and the National Museum of Wales. This will afford visitors some idea of the way in which the city has taken advantage of one of the finest municipal building sites in Europe.

A picture of similar size will give a view from the air, of Cardiff Docks—showing the compact lay-out which enables ships to obtain a quick turn-round.

The North and South Halls of the Exhibition will be devoted to the city's exhibitors, in which coal, wagon building, wire ropes, Welsh textile manufacture, driving belts for machinery, etc., will be on view.

In the Central Hall will be a model of Cardiff Castle, kindly lent by the Marquis of Bute, as well as a model of the University of South Wales and Monmouthshire. There will be models of early and modern types of steamships, showing the great advances made in steamer construction.

In short, it is Cardiff's intention to make use of this civic opportunity to develop new markets in the Dominions overseas, and to show that Cardiff is determined to play its part in the development of Empire trade, thus attaining one of the principal ends in view in the establishment of the British Empire Exhibition.

"The Architect" Fifty Years Ago.

JULY 11, 1874.

ARCHITECTS' RESPONSIBILITIES.

There is perhaps a certain satisfaction in being told that a lawsuit against an architect for "negligence and want of skill" is never likely to be successful, and in fact need never be anticipated, except at the hands of an unscrupulous client; and we are fully disposed to attach the utmost practical importance to the rule that has been laid down—never to act for a bad client or to accept a bad builder; but after all there cannot but be a considerable number of cases constantly occurring in which clients turn out to be unexpectedly litigious, and builders to be unexpectedly disloyal to their trust; and it is vain to disregard the warnings that have been given, when based as they are upon that which alone is the real discovery that has been made, namely, that the profession at large are in fact extremely ignorant of the position in which the law is calculated to place them whenever it may happen accidentally to have them at a technical disadvantage. The obnoxious principle, be it remembered, is this—that an architect is liable at any moment, in spite of the most unblemished integrity, upon grounds which have never entered into his calculations, and in respect of misadventures which he could not possibly prevent, to be compelled to pay sums of money which are not only out of all proportion to his scale of remuneration, but absolutely unlimited by any considerations of his personal ruin. In other words, the commonest risks incidental to a building enterprise are not, as the architect has been accustomed to imagine, risks which are to be accepted by the proprietor as part of his venture, but may be imposed, at the will of an inexperienced jury and a judge who can only deal with abstractions, upon the unfortunate supervisor whose practical task is to direct and not to watch, and whose commission at the best, and without any such liabilities at all, is the hardest earned money to which any English profession can point.

CASTLEFORD.—In association with the Miners' Welfare Committee a scheme is to be prepared for a technical and mining institution for Castleford and Normanton.—The Castleford Temple Street Council School is to be enlarged by 350 places at a cost of £7,000.—A Middle School is to be erected at a cost of £24,000, accommodation to be provided for 600 scholars.

WARLFORD.—At the Urban District Council Mr. James Hurtley, the clerk, submitted correspondence which has passed between the Ministry of Health and himself with regard to the payment of Government Subsidy under the Housing Act, 1923. The Minister of Health has intimated that he is not prepared to approve the payment of subsidy where the cost of the house and site exceeds £600. This decision, unless altered, will have the effect of several schemes for the erection of houses by private enterprise not being proceeded with. In some of the cases the applicants have, in fact, commenced building operations, relying upon the subsidies. The local M.P. is to be asked to pursue the matter.—The Council recommend a contract with Messrs. Walter Wyer, Ltd., of building 28 houses at £495 each.

General News.

AUDENSHAW.—The Urban Council have arranged with the Universal Paviors (Manchester) Ltd., for a rubber paving experiment in Conning Street.—Housing subsidies have been passed as follow:—G. H. Fowles; Messrs. Moreton & Woodcock, 2 houses; Messrs. Whittaker & Brown, 2 houses; The Rough Cast Building Co., 2 houses; Samuel Hadfield, 18 houses; Messrs. E. & J. S. Lawton & E. Davey, 3 houses. — Plans passed: Church, Denton Road, The Wardens of St. Hilda's; new Belfast roof, Golden Shred works, Thos. Robertson & Sons; alterations to Queen's Arms, Guide Lane, Groves & Whitnall, Ltd.

BASINGSTOKE.—A loan of £1,400 has been sanctioned so that the Town Council may purchase two fields adjoining the War Memorial park.—The widening of Bunnian Place at a cost of £2,025 is proposed.

BIRKENHEAD.—The Corporation are seeking sanction for a loan of £3,500 for the erection of six wooden hutments for temporary housing purposes. Plans passed for five pairs of semi-detached houses, Bebington Road.—Plans have been approved for the provision of a central school for 400 boys and 400 girls, and of a school for 348 juniors and 348 infants, on the Bedford Drive site.

BRADFORD.—The Corporation Town Planning Committee have sanctioned the following estate development schemes:—Mr. A. Foster, Coniston Grove, Girlington; Mr. J. S. Driver, Ingleby Road; Mr. W. Cowburn, Westfield Lane, Idle; Mr. R. Dennison, Fairfield Street, Tong Street; Messrs. Groves and Greenwood, Beechwood Drive, Wibsey; Mr. S. Priestley, Frimley Street and Hawes Road, Little Horton; the Exors. of the late J. Baxter, Low Averingcliffe Estate, Eccleshill Bank; Mr. T. S. Terry, Moorside Road, Eccleshill; Mr. T. F. Hoare, Mayo Avenue.—A committee of the Corporation have arranged to visit Birmingham with a view to obtaining information as to the manner in which the Birmingham Corporation lease land and buildings belonging to them.—Floors are to be reinstalled and other work carried out at the cold stores at a cost of £1,000.—The Markets Committee have accepted the tenders of Messrs. Taylor & White Ltd., for painting at the market at £2,186, and of Messrs. John Moulson & Son, Ltd., for reconstructing in glazed brick the bases of the fish stalls at £258 10s.—The Corporation have obtained an amended plan of the layout for 40 houses to be erected by Messrs. A. Wickenson & Son, at New Line, Greengates.—Loans of £26,191 and £8,255 have been sanctioned for roads and sewers on the Swain housing estate.—In regard to the Brierley housing estate the Committee reports that Messrs. H. Boot & Sons, Ltd., have agreed to reduce their contract price of £416 per house to £415 per house for the additional 506 concrete houses to be erected on the estate, and also agreed to withdraw the stipulation for fluctuation in the price per house in accordance with varying cost of materials.—Tenders are to be invited for the erection of 28 houses at Thornton, and 60 at Swaine House estate.—Subsidies have been voted as follow: J. Barker, 15, Sunbridge Road, Wellington Nurseries, Leeds Road, Undercliffe, 1 house; L. D. Sunderland, Prospect House, Idle, Westfield Lane, Idle, 28 houses; J. H. Smith, 15, Sunbridge Road, Norman Avenue and Norman Crescent, Eccleshill, 4 houses; The Heaton (Bradford) Estates Co., Ltd., (agent, R. T. Wilson, 5, Sunny Bank Road, Shipley), Smith Avenue, 2 houses; R. J. Patchett, Ltd., Clayton Heights, near Queensbury, Nursery Road, 5 houses.—The Ministry of Transport have sanctioned the scheme for a new road from Queen's Road to Five Lane Ends, Idle, at a cost of £123,766.—The Education Committee are considering the erection of a secondary school for 400 to 600 girls, on the Bolling Hall site.—It is suggested that accommodation for 340 patients should be provided on the Westmoor Estate.—The Water Committee recommend increasing the capacity of the Scar House reservoir at a cost of £90,000.—The Ministry of Health have urged postponement of the scheme for adapting for condition house purposes warehouses in Caval Road at a cost of £17,000 to avoid displacing housing labour.

CARLISLE.—The City Council have made a contract with Messrs. G. Simpson & Son for the re-modelling of outbuildings at Coledale Hall into a farmhouse, in connection with the Newtown Road Improvement. Contracts have also been made with John Laing & Son, Ltd., for the erection of an electricity transformer sub-station at Tarraby, and for the construction of new roads and sewers on the Wigton Road Housing Estate, and with Messrs. Ellison Bros. for installation of and wiring for electric light for 60 houses at Blackwell Road, and 40 houses and 50 bungalows at Wigton Road.—The City Council are arranging with the Rural Council as to the supply of water in bulk to the parishes of Rockliffe and Crosby-on-Eden.

CHELMSFORD.—Having regard to the labour available, the Health Ministry will only sanction 50 houses as an instalment of the Corporation's scheme for 250 on the Boarded Barns Estate.—The Council have been conferring with the Essex County Education Committee with regard to the erection of a school of art at the rear of the present public library and museum building.—Extensive building developments are foreshadowed in a report of the borough engineer in urging the appointment of an architectural assistant. He stated that, besides housing, there were many other corporate properties, including municipal offices, schools, etc., and proposals would in the near future be under consideration for a new Council Chamber, some new buildings in connection with the new water undertaking, and possibly also a new Council school. Plans passed: House, Galleywood Road, for Mr. W. Underwood; fifteen houses in two blocks of six and one block of three in Marconi Road, for Mr. W. Digby.

CHELTENHAM.—In connection with the flooding of the Chelt, the Town Council have instructed the Borough Engineer to submit plans to deal with the evil.—Improvements at the sewage works are proposed at a cost of about £6,000.—The widening of Reddings Road is proposed.—The Council are considering a scheme to improve the ventilation of the Town Hall at a cost of £450.—The Mayor has offered to present a fountain for the St. George's Square bowling green.—Improvements are to be carried out at the cattle market at a cost of £400.—The Jubilee Tower has been reported to be in a dangerous condition owing to serious defects caused by the zinc roofing sheets having fallen from their original positions, and the Borough Engineer is to get estimates for repairs forthwith.—A loan of £300 has been sanctioned for the erection of a pavilion in the bowling green.—It is proposed to complete the St. Peter's Schools at a cost of £16,000.—Plans passed: Day, G., and Hough, T. F., houses off Gloucester Road; Sharpe and Fisher (1924), Ltd., additions to offices, Swindon Road; Maudeville, Mrs. M. W., addition to 14, Pittville Villas, Prestbury Road; Hiron, J. B., house, Whaddon Lane; Ladies' College Council, new boarding house, Christ Church Road.—Plans submitted: Hough, T. F., house, Gloucester Road; Hiron, J. B., house, Whaddon Lane; Healing and Overbury, preliminary plan of proposed new frontage line at 394, High Street (late Capital and Counties Bank).

EASTBOURNE.—The Housing Committee of the Corporation, having reconsidered the matter of the thickness of partitions, have decided that all partitions carrying joists in every case be not less than 4½ inches in thickness.—The Corporation are to discuss with Brighton Corporation a scheme for a road between the two towns.—The Compton Estate is being developed and new roads are being planned in the Warren.—Regarding the establishment of a Land Registry of the town, Mr. Forvarque, town clerk, declares this to be unnecessary, and points out that if registration is made compulsory it must necessarily add to purchasers' expenses, as, not only would they have to pay the cost of the conveyance to themselves, but also the cost of registration. Persons are quite at liberty now to do it if they wish, under the voluntary arrangement.—Plans passed: Cold storage, 110, South Street, for Messrs. Cone Austin, Mr. P. D. Stonham being the architect and Mr. A. W. King, builder; house and shop, Church Street, for Mr. T. Swadling, Mr. W. R. Hamblin, architect; alteration Railway Arms, South Street, of Kemp Town Brewery, Messrs. Denman & Sons, architects; conversion into flats, 37, Carlisle Road, for Mr. H. O'Hara, Mr. P. D. Stonham, architect; house, Grassington Road, for Miss Robinson, Mr. Stonham, architect; alterations, Royal Marine Hotel, Royal Parade, for Mr. G. G. Newby, Mr. A. Ford, architect, and Mr. Hookham, builder; shops and flats, Meads Street, for Messrs. M. Martin & Sons; house and shop, Sidley Road, for Mr. M. Hookham, Mr. A. Ford, architect.

ELLESMERE PORT AND WHITLEY.—Messrs. Prescott and Davies, architects, have inquired as to the proposals of the Urban District Council regarding the building line for the Prince's Road Extension as they desire to rebuild the Prince's Hotel. The Surveyor is to give the information.—The tenders have been accepted of Messrs. E. B. J. Gould, Ltd., for the erection of 208 houses, in blocks of four, at £63,648, and of Messrs. Thomas Warrington & Sons, Ltd., for the erection of 52 semi-detached houses at £22,334.—Trustees of the late Mr. H. Wilson have prepared an estate lay-out plan and the Housing Committee have asked the Surveyor to prepare a plan showing as one zone for town planning purposes the land bounded by Flatt Lane, the railway, and the highway from Pooltown Bridge, along Pooltown Road and Whitby Road to the junction of Whitby Road with Flatt Lane.—The Surveyor has been asked to prepare plans showing the following improvements:—Widening of bridge across the Rivacre Valley; rounding off of the corners on the road leading to Great Sutton from the Pooltown Railway Bridge; construction of a footway along Stanney Lane and Arrowe Lane; the deepening of the ditch on the side

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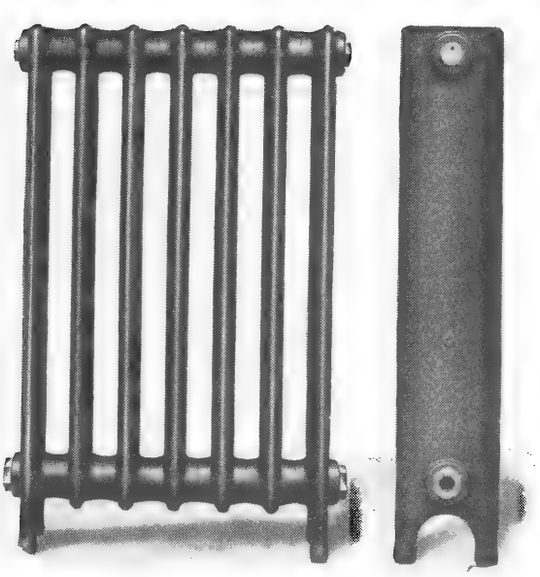

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of the Pooltown Road leading from the Railway Bridge to Atherton Lodge.—Plans passed: semi-detached villas in Pooltown Road, for Mr. John Jones; sports pavilion, Rossmore Road, for Messrs. F. A. Frost & Sons; villas in blocks of four in Chester Road, for Messrs. Salter Bros., Ltd.

HASTINGS.—Drainage works are to be carried out at the secondary school for girls at a cost of £420.—Footpaths, which have not been repaved for 36 to 40 years, are to be repaved at a cost of £3,516.—To prevent overcrowding of Council houses the Housing Committee are considering the desirability of placing a limit on the number of persons who may dwell in the houses.—Plans passed: house and shop in Old London Road, Mrs. Henson, owner, per Mr. P. H. Oxley, architect; bungalow, Bexhill Road, Mr. H. V. Nicholson, owner, per Mr. H. Stroud, architect; conversion into flats of No. 18, Pevensey Road, Mrs. Grierson-Lowe, owner, per Mr. P. H. Oxley, architect; garage and extension to shop, etc., at Nos. 46 and 47, Middle Street, Messrs. Paine, Rogers and Co., owners, per Mr. P. H. Oxley, architect; house, Filsham Road, Mr. John Cuthbert, owner, per Mr. A. R. Henderson, architect; house, Filsham Road, Mr. H. B. Sales, owner, per Messrs. Callow and Callow, architects; lavatories, St. Matthew's Church Parish Room, London Road, Rector and Churchwardens, St. Matthew's Church, owners, per Messrs. Adams and Jarrett, builders; house, Trinity Villa, Mr. H. J. Stickells, owner, per Mr. J. Hunt, architect; new sterilizing room at Buchanan Hospital, Springfield Valley, Committee of the Buchanan Hospital, owners, per Mr. Henry Ward, architect.

LEICESTER.—Councillor Pearse is asking the Housing Committee to consider the practicability of proceeding with the erection of semi-permanent houses at not less than 24 to the acre, that they report to the Council at an early date the cost of erecting such houses, consisting of two and three bedrooms together with living roon, scullery-kitchen with copper, bath and W.C., including land, road-making and sewers, together with the weekly sum to be paid to cover the cost of interest, sinking fund, fire insurance, rates and repairs, so that at the end of 25 years the tenant-owner may be in credit with the Corporation to such a sum as may facilitate the erection or purchase of a permanently constructed dwelling house on the termination of that period.

MANCHESTER.—A special report on the question of sale or retention of the City Hall in Liverpool Road, Deansgate, has been presented to the Corporation. This explains that the site of the City Exhibition Hall was purchased from the Lord of the Manor in 1847, along with other market properties. At that time it was an open space used as a hay market and for the holding of fairs. The fairs were abolished in 1876, and the ground was enclosed and roofed four years later. From that time to 1909 the building was occupied as a miscellaneous market, and in the latter year a lease was granted for the purpose of holding exhibitions. As a result of the outbreak of war, exhibitions were temporarily discontinued, and for a period the building was occupied by arrangement by the Ministry of Munitions as a Bond Inspection Depot, and later by the Ministry of Labour for training of disabled soldiers. In November, 1921, a 10 years' lease was granted to the present occupiers, the Provincial Exhibitions, Ltd., who have the option of terminating the tenancy at the end of five years. The total area of the City Exhibition Hall is about 3,940 square yards, and the Committee own property on the opposite side of Tonman Street, (which is adjacent to the City Exhibition Hall), the major portion of which is utilised as a miscellaneous market by those persons who were displaced in 1909 when the larger building was let for exhibition purposes. This market, and also a portion of Tonman Street and the Higher Campfield Market, are very extensively used for miscellaneous market purposes on Mondays, and at times the street is greatly congested. By arrangement, the market building has been occupied by the lessees of the Exhibition Hall for certain purposes, on payment of an agreed rent, in order that it could be used as an annexe to the City Exhibition Hall premises. The Markets Committee have carefully considered the question of the sale or retention of the City Exhibition Hall premises, and are unanimously of opinion that the present is not an opportune time to endeavour to dispose of the property.—The Town Planning Committee report the support of the subjoined proposals: nine houses in Glen Avenue, Blackley; three houses, Errwood Road, and Crompton Road, Levershulme; two houses, Clifton Avenue, Burnage; house, Burnage Hall Road; two houses, Egerton Road South; two houses, Kingsway; house, St. Brannock's Road; two houses, Alan Road, Withington; two houses, Grangethorpe Drive; new classroom, Roumanian Synagogue, Ramsgate Street, Broughton; two houses, Polefield Road, Blackley; Salvation Army Hall, Osborne Street, Harpurhey—Arthur Rowe, Lt.-Col.; two dwelling-houses, Park Road, Higher Crumpsall; two dwelling-houses, Barrow Hill Road, Hightown; Dwelling-houses, Rectory Road, Crumpsall; Two bungalows, Polefield Road, Blackley; parts of Belgrave Road and Albert Road, Crumpsall; street lay-out, The Homeway, Crumpsall; extension to factory, Moulton Street; alteration and extension to works, Crumpsall Vale, Blackley.

MARYLEBONE.—The Borough Council invited tenders for the erection of two additional blocks of tenements upon the North Street frontage of the Fisherton Street site, together with coal and perambulator stores. The tender of Messrs. Walker & Slater for the portion of the scheme now in progress of erection amounted to £12,118 and £12,000 respectively for the two blocks of tenements, and £312 for the coal and perambulator store. The Housing Committee recommend the tender of Messrs. Walter Jones & Sons, Ltd., of 64 Victoria Street, S.W., at £28,806 5s. 5d.

NEWCASTLE.—The City Council have authorised an expenditure of £1,660 on sewer work to avoid floods, which it is pointed out, will increase with the development of the Pendower, the Benwell Grange and the Deleval Road estates.—Scheme to cost £4,736 are to be carried out for providing cloak-room accommodation and covering in of both ponds at the Heaton and Walker baths in accordance with plans prepared by Mr. Cross, architect.

OXFORD.—The City Council are considering means of increasing the office accommodation.—Mr. J. E. Wilkes, the city engineer, in the course of a report on floods, mentions that a scheme for flood prevention in Oxford was initiated some two years ago by Lord Desborough, and is now being prepared by the chief engineer of the Thames Conservancy. There are great difficulties to be overcome, inasmuch as the scheme involves making a new river channel from Sandford to King's Weir; new bridges would be required in all probability under the Abingdon Road or the G.W. Rly.; also under the Wytham Road. The scheme, though admirable and inevitable, would obviously be a costly one, hence it may be years before it is carried out; therefore the best way of avoiding damage by floods at the present time is to keep not only allotments, but buildings, out of the Thames floodway.—The City Council are negotiating for land at Sunnymeade for a recreation ground and bathing pool. It is proposed to purchase 29½ acres of land from Magdalen College at a cost of £13,900 for housing purposes. Messrs. Morrell's Trustees are preparing a scheme for the development of the South Park site, and involving the construction of a road with access to London Road. Plans passed for subsidy houses:—Messrs. Simmons & Watts, six houses, Fairacres Road extension; T. E. Knowles, two houses, Hamilton Road; Mrs. E. L. Smith, two houses, Victoria Road; Mrs. A. Bayes, one house, Hamilton Road; J. E. Tyler, two houses, Riverside Road; Messrs. Hinkins & Frewin, two houses, Hamilton Road; Walter J. Eyles, one house, Abingdon Road; Miss M. H. Somerton, one house, Abingdon Road. Plans passed:—City of Oxford Motor Services, Ltd., extension to the manager's office at their premises, No. 138 High Street; A. L. Alexander, 110 Woodstock Road, dwelling-house, Belbroughton Road; Hill, Upton & Co., George Street, two lock-up shops and shop and business premises, George Street; Mrs. Mullaly, 14 Bardwell Road, house, Linton Road; E. D. Perkin, Tiverton, Devon, house, Lonsdale Road; Miss Shepherd, 18 Rossetti Garden Mansions, Chelsea, S.W., house in Belbroughton Road; The Town & County Wine Co., Ltd., 91 Cannon Street, E.C.4, mineral water factory, rear of Sidney Street and Magdalen Road; A. E. Carter, 32 Helen Road, house, Botley Road; Messrs. Hinkins & Frewin, Canal Street, and W. J. Smith, 9 Adelaide Street, two houses, Hamilton Road; Messrs. Humphreys, Ltd., 187 Knightsbridge Road, S.W., grand stand, Rugby Football Club, Iffley Road and Jackdaw Lane; University of Oxford, second portion of the buildings in connection with the School of Pathology now being built in the University parks; The Governors of Lady Margaret Hall, block of buildings as students' quarters east end of Norham Gardens and abutting on existing college buildings; J. Gray, 1 Catherine Street, house on land in front of his residence.

PETERBOROUGH.—Alternative schemes for a by-pass road are to be prepared to avoid the costly scheme of widening Narrow Road. One alternative is a road through the Palace grounds.—A loan of £800 is being sought for the erection of a maternity centre in Brook Street.—Sanction has been given to a loan of £7,352 for the erection of 16 houses at Grange Road.—Plans recommended: 4 houses, Stone Lane, Mr. E. Langsley; house, Fairfield Road, Mr. Cox; house, Grange Road, Mr. G. H. Bird; 2 houses, Park Road, Mrs. C. Howitt; house, Park Road, for Miss Torey; 4 houses, Fairfield Road, Messrs. Corner & Campion; bus garage extension, Peterborough Electric Traction Co., Ltd.; house, Eastfield, Dr. J. Walker; heating chamber, etc., Cromwell Road, Messrs. J. Thompson & Son.

SLEAFORD.—The Urban Council are purchasing land in Drove Lane for a housing scheme.—Messrs. Dale, Bailey and Buttler presented details of a scheme for assisting private

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enterprise in the erection of houses of the value of £500 or thereabouts, inclusive of land, by advances being made by the Council to working men up to 90 per cent. of the value of the property. The scheme was referred to the Housing Committee for their consideration.

SOUTHWARK.—The Borough Council recently decided to restore the clock tower in Newington Butts. Now the borough engineer has erected scaffolding around the edifice and, having ascertained the extent of the work which would have to be undertaken, has submitted quotations for carrying out the work from three firms. Obviously, on a work of this character no firm estimate can be secured, having regard to the fact that the ultimate cost depends upon the prices of labour and material during the period that the work is in progress, and to other factors. The Works Committee have heard the views of the borough engineer upon the matter and come to the conclusion that the quotation of Messrs. E. J. & A. T. Bradford, of 62a Borough Road, for cutting away all face stones and coating with patent stone and other work incidental thereto, should be accepted. The cost would approximately be £600.—The Works Committee has provisionally passed plans submitted by Mr. G. T. Morris, 24 Portugal Street, W.C.2, to erect a warehouse building on the site of Nos. 19-23 Rushworth Street.

TORQUAY.—The Corporation Waterworks Committee have now accepted the tender of Messrs. Gunn & MacNeill, £14,252, for the construction of the Great Hill reservoir.—The tender of Messrs. Heath Bros., Bovey Tracey, £1,645, has been accepted for the erection of two cottages at the Watershed.—The offer of Mr. F. Maule has been accepted for the erection of 25 houses at Stentiford's Hill at £13,568.—Lymington Road is to be widened at a cost of £2,728.—The Devon County Council have promised to consider the question of the sea defence works on the Torbay Road as soon as the plan and estimate of the larger works have been forwarded by the Borough Surveyor, and in the meantime the works already approved are to be carried out at once at a cost of £2,800.—To improve the water supply to the Higher Ereth Road district, a new line of pipe is to be laid at a cost of £2,250.—The fire station is to be improved at a cost of £446.—At the Housing Committee Mr. Hield, town clerk, read a letter from Mr. H. C. Goss, the surveyor for the Warberry Vale Estate, explaining that there would be 200 plots in all available for the erection of workmen's houses, but owing to the time limit imposed by the Minister of Health it was an impossibility to proceed with their development, and asking that application be made to the Minister of Health for a further extension of time. It was further pointed out that, owing to the increase in wages and materials, and also the configuration of the land, not only on the above estate, but also of other lands in the borough, builders would not tender for the erection of houses at the cost of £500. The town clerk was instructed to lay the whole facts before the Minister of Health with a view of getting both an extension of time and of the limits laid down as to the cost of erecting the houses.—The Ministry of Health are being asked to sanction a loan of £17,000 on works at the harbour. Plans passed:—Messrs. Watson & Watson, final road plan, Wellswood Hall Estate; Messrs. Sutcliff, Tucker, Kernick, and Kentisbeer, four houses, Westhill Lane; Torquay Co-operative Society, Ltd., extensions to 81 St. Mary Church Road; Messrs. Britton, Cameron, Salter and Kelly, four houses, Empire Road; Messrs. Murch, Son, and Tucker, two houses, Windsor Road; Mrs. D. Price, for two houses, Empire Road; Churchwardens, for lychgates, St. Efride's Road entrance, Torre Parish Church; Mr. T. J. Crossman, additions and alterations, Temperance Street (Mr. Crossman to be approached with regard to setting back these premises); Churchwardens, for additions, Cockington Parish Rooms, Sherwell Lane; Miss Haywood, house, Hampton Estate; Messrs. Weeks and Maeers, two houses, rear of Mallock Road; Messrs. Clough, Hugh, Wylie, and Beer, four houses, Empire Road; Messrs. Chisnell, Eastwood, Crews, and Cowell, four houses, Empire Road; Mr. Lazzari, Mr. G. Hawken, Mr. A. W. Hore, and Mr. H. Squires, houses, Warberry Vale Estate; Torquay Corporation, for 25 houses, Stentiford's Hill; Mr. Whittall, house, "Innisfail," Meadfoot Road; Mr. R. L. Kellow, house, Clennon Lane, Barton; Mr. Annear, house, Warberry Vale Estate; Mr. E. J. Willis, two houses, Westhill Lane; Mr. Pitts and Mrs. Callard, houses, Warberry Vale Estate; Messrs. Davey Bros., six houses, Warberry Vale Estate; Mr. C. Tucker and Mr. L. Sharp, houses, Warberry Vale Estate.

WAKEFIELD.—The City Council have accepted the tender of Messrs. G. Blayey & Son, Ltd., for alterations at the public library at a cost of £311.—Expenditure has been voted of £21,670 for the erection of 60 type A2 houses on the Portobello Estate, and £3,016 for the erection of two blocks of four houses each of A3 type.—The City Surveyor has prepared plans for adapting the Isolation Hospital for its continued use temporarily and for a new ward on a site facing to the existing hospital, and also of a wooden building for use as supplementary sleeping accommodation for nurses. He estimated the approximate cost at about £5,000.—Last year 155 houses were built; 102 by the Corporation and 53 by private enterprise.—The housing architect has submitted a short survey of local conditions regarding labour and materials and his suggestions for a building programme embracing a joint scheme for adoption by the Master Builders and the Corporation, and the Committee decided to place the scheme before the representatives of the Master Builders. Subsequently the Committee met the President, Mr. J. Kitson, the Secretary, and six other members of the Master Builders Federation representing various trades. The representatives were asked:—(1) If they were prepared to agree to erect as a Federation not less than 200 houses per annum, for a period of 15 years, at net cost on the site, plus 7½ per cent. for profit, such cost to be agreed between the Master Builders, the operatives, the Corporation and the Ministry of Health, and (2) whether they were prepared as a Federation to enter into a contract to carry out this work for the Corporation and to pool their resources so far as was necessary to do this. It was explained to the Master Builders that these questions were put before them for their consideration in anticipation of Mr. Wheatley's Housing Bill becoming law. The Architect's survey and suggestions for a scheme were submitted and it was agreed that it would be necessary to form a co-partnership or company to give effect to it, but it was for the Master Builders to work out the details. After a long discussion the representatives of the Federation said that they would bring forward the suggestions before their Federation at an early date, and thoroughly investigate them and in due course let the Corporation know the result. Before leaving the Committee, the representatives asked the position with regard to the tenders already sent in, but the view was put forward by the Committee that should the larger scheme find favour it would be better for the tenders to be allowed to lapse, as otherwise the builders engaged thereon would be unable to take part in the larger scheme. Plans passed:—Mr. T. W. Sharpe, alterations to premises in Cross Square for Messrs. James Smith & Son; Mr. W. Wrigley, house in Woodthorpe Lane for Mr. H. Summers; Mr. J. P. Firth, two houses in Dewsbury Road for Messrs. A. Kendal and D. Scott; Mr. H. Dobson, house and house and shop in May Bush Road and Agbrigg Road for Mr. A. J. Mutch; Mr. W. Wrigley, alterations and additions to the Strafford Arms, Bull Ring, for Mr. C. S. Norton; Mr. W. Wentworth, house in Balne Lane for Mr. G. Ashton; Messrs. Kitson, Parish & Ledgard, alterations and additions to the Commercial Inn, Thornes Lane, for Messrs. J. Tetley & Son, Limited; Mr. J. P. Firth, additions to premises in Kirkgate for Messrs. Redman, Ltd., and Messrs. Marks & Spencer, Ltd.; Mr. A. E. Carbert, four houses in Barnsley Road for himself; Messrs. Massie & Holdsworth, two houses in Dickinson Street for Mr. M. Walker; Messrs. Bell & Kay, house in Horbury Road for Mr. W. A. Craven; Mr. A. Leitch, covered terracing in the Belle Vue Ground for the Wakefield Trinity Football Club; Diamond Coal Cutter Co., Ltd., alterations and additions to smiths' shop, at Stennard Island, for themselves.

WOODFORD.—The Urban Council have passed plans for houses and a new road at South Woodford, and for a house in Monkham's Drive. It is proposed to establish a depot and store on land at the sewage works.

YORK.—The City Council has scheduled further cobbled streets for paving with concrete. A Sub-Committee have visited the fever hospital and viewed the site of the proposed extension, and instructed the city engineer to prepare a plan for new administrative block, laundry, disinfector, ambulance shed and isolation ward.—Land is to be secured for rehousing those who will be evicted from those slum areas which are to be cleared.—The Housing Committee have asked the city engineer to obtain particulars as to houses constructed of concrete, and it was decided that the Sub-Committee should visit the nearest place where such houses have been erected.

Too Late for Classification.

CITY OF LONDON.—The City Corporation propose to clear areas in Hutchison Street and Queen's Street in the Minories and provide tenements for persons displaced on a site outside the city at a cost of £95,000. It is being suggested that premises at the corner of Cheapside and King Street should be acquired in order to permit of 'buses and heavy vehicles turning into King Street from Cheapside and proceeding through the widened Gresham Street to Moorgate.

CLAPHAM.—The New Road Elementary School is to be rebuilt at an estimated cost of £29,378.

CROYDON.—The Corporation have decided to build a school for about 850 children on a site at Long Lane, Woodside.

HACKNEY.—The L.C.C. Education Committee recommend the tender of Messrs. C. P. Roberts & Co., Ltd., £19,900, for the erection of an elementary school at Holcroft Road.

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The Aura of Registration.

Now that the issue of Unification has been determined—for it may, we think, be taken as certain that the members of the Society of Architects will pronounce as definitely in its favour as the members of the Institute have done—Registration will absorb the attention of the profession.

With regard to Registration we confess to occupy a position of almost complete neutrality only influenced by the conviction that it represents an end which is ardently desired by a very large majority of architects, a majority so large that the application of any test would be entirely unnecessary.

This, to our mind, constitutes the greatest argument for attempting to secure the adoption of a Registration Bill, and one which would render any opposition to such a measure within the profession both mischievous and abortive.

Those within our ranks who are inclined to look with disfavour on the principle of Statutory Registration should consider that even if we think a grievance to be imaginary, tangible good may be done by its removal. Men who imagine that their success is jeopardised by an obstacle which we think does not exist in reality will probably work better if that apparent obstacle is removed, and when they are satisfied they will be better able to exercise clear judgment and to realise facts.

We believe the advantages of Registration to be a mirage which deludes many, and in order to dispel this illusion by an actual test, we shall wish those who support Registration every success in their efforts to secure the passage of a Bill.

At the same time it may not be altogether inopportune to hint at some of the reasons which render us doubtful as to whether the profession will profit by the adoption of a measure of Statutory Registration.

At present the house and estate agent, the builders' draughtsman and others can call themselves architects, and can try to secure work which we should all like to see carried out by properly trained and qualified men. The younger architects who see their work curtailed by such competition are naturally anxious to secure protection, but if an Act is passed we may reasonably ask whether it will achieve the end desired. It certainly would do so if Parliament would sanction a Bill preventing the erection of buildings by anyone but a qualified architect. But the advocates of Registration know this to be impossible, and the utmost they are likely to achieve is the limitation of the title "architect" to those who are registered and have satisfied certain tests.

This being so, what will be the position of the men who have in the past usurped the title of architect, and obtained a certain amount of work which should have gone to those who possess a modicum of training and education? At present those who steal our title have to defend the employment of architects, but when they can no longer use the title will they not call themselves "structural experts," or some such title, and will not their arguments be "do not employ architects who are unpractical men charging heavy fees, but let men who are trained in the practical school of experience and whose charges are smaller do your work"?

If this should be so would not the position of many of the younger men who are struggling to obtain a start be worse than it is at present?

And, again, as it is an axiom that the law cannot take away from any man the means he at present enjoys of making a living, we should if we secured an Act have to allow a large number of almost completely unqualified men to practise as architects, and give them the added security of a definite position on the register. The competition of such men would be more and not less serious after the adoption of a Registration Act. It is true that in the process of time this class of architect would die out and other better qualified men would take their place, but the change would benefit future generations of architects rather than our own.

It may be asked what the alternative is, and in what manner the general public can be induced to employ architects more frequently, and we are afraid there is no immediate and complete remedy which can be proposed.

If everyone who employed an architect had reason to be satisfied with the services rendered, if the buildings erected were well planned and economically carried out, if advice given were always justified by results, and if, on the other hand, those who employed architectural "pretenders" were in all cases victimised, we should in a comparatively brief space of time find that the services of architects were increasingly utilised, and the services of the speculative builder and the *soi-disant* architect dispensed with. But unfortunately this clear black and white division of sheep from goats does not always obtain. Frequently honoured members of the sheep fraternity neglect or overlook some cardinal requirement of their clients and fail to give them the feeling of security they require. We have to remember the fact that each man views his personal concerns, desires and ambitions as a whole, and only concerns himself about those of others as their ambitions and aims may bisect what may be called the strictly personal orbit. It will be useless to demonstrate to them that the architect who has failed to meet their wants is a man of genius, useless to talk to them about his knowledge of the higher truths of architecture or of his æsthetic gifts. If he has failed to give satisfaction through overlooking wants and desires, which may seem to him trivial, he has done not only a disservice to his own interests but to the profession to which he belongs. And, conversely, he who can realise his clients' aims and wishes not only establishes his own reputation and furthers his own interests, but is serving to extend the highway along which the public must travel to the proper appreciation of architecture as an art which may be of service to humanity. He is also making the way easier for the younger men who are struggling to obtain a start and who are conscious of the many difficulties which lie before them. The proper study of mankind is man, and unless we fully realise this

we shall waste time on things which are important and unimportant chiefly in the degree to which they appeal to the sympathy, understanding and needs of men.

We have been told we cannot build up an A1 civilisation with A3 men, nor can we produce a perfect state by any system of rules. It is the men behind the rules and regulations and not the rules and regulations themselves from which will come success or failure. For the reasons we have stated we regard the issue of Registration as relatively unimportant, but because it is desired by a majority we hope it will be effected, but in the end the success of architects and the status of the Institute as representing them will be determined by the personal qualities and abilities of the individual members belonging to it, and not by any particular policy it may endeavour to promote. The architect's whole aim should be to make the best use of a site or building for his employer, and to show him he has done so, entering into his client's aims and intentions in a spirit of understanding and appreciation.

It would be most helpful to us if we could apply some positive tests which would help to show us what it is the public really appreciate. We should like, for instance, in the case of a building, to have the architect's statement of his intentions and aims, and to compare it with a client's considered criticism of results. We believe we should frequently find a wide disparity between the two. Excellences and points which the architect considered as all-important would in many cases remain unnoticed, and points he had regarded as unimportant would be emphasized. It is usually wise, in showing a sketch design to a client, to confine oneself as far as possible to a colourless explanation of facts, because uninfluenced by any expression of positive opinion the client will often express himself more freely than he otherwise would do so, and such expressions will prove more useful to us than any other, unless our wish is to carry out not what the client desires but what we want him to build. A client who feels that he is really responsible for a solution will in most cases be far more satisfied with that solution than with one which he feels has been imposed on him. And, in addition, we have often found that we are inclined to attach far too much importance to some feature or other we have worked out which we afterwards feel was relatively unimportant. We seldom come across the client who has such an idea of our importance and places such reliance on our skill and taste that he is better satisfied with what we want than with something which embodies his own ideas, but the client who feels he has partly shaped a design will be the last to allow it to be adversely criticised.

Our Illustrations.

ENTRANCE FRONT OF THE RUSSELL SCHOOL, "BALLARDS," ADDINGTON. } SIR ASTON WEBB, P.R.A., & MAURICE E. WEBB, Architects.
DINING HALL, RUSSELL SCHOOL. }

THE ANGLICAN CATHEDRAL, JERUSALEM. GEORGE JEFFERY, F.S.A., Architect. (See also pp. 40 and 41.)

Notes and Comments.

The Building Situation.

The "Daily Herald" asserts that employers in different parts of the country are conceding the men's terms, paying them 1d. more an hour, agreeing to a 44-hours week, and a payment of 50 per cent. of the wages lost during wet times. We believe the wish may be father to the thought, for while we know that in many country districts work is going on, it is work on the basis of the existing and not the demanded terms. We sincerely trust that the employers will stand firm, as the position they have taken up is justified, and until the building organisations have been shown that they cannot indefinitely bleed the public there will be no peace. If the lock-out were strictly and universally enforced trouble would be ended in a comparatively brief period, but to concede anything at all while labour is in its present mood is only asking for further trouble, which will inevitably come. We sympathise with Lord Buckmaster in the dilemma in which he is placed, for it must be exasperating for anyone with trained judicial judgment to find he can make no headway because one of the parties in dispute will not come down to facts. We have had about enough of the grievances of the workers who will not work and believe that an interval of quiet thought during a lock-out might help to bring them to a more reasonable frame of mind.

Ask and Ye Shall Have.

The Labour member for Shoreditch has asked leave to bring in a modest little Bill to enable the local authorities to seize unoccupied houses with the object of relieving overcrowding. The proposed Bill provides that buildings which have been empty for more than three months can be so seized. Reasonable rent, according to working class standards, shall be paid for the houses so occupied, and these rents, less 10 per cent. for working and administrative purposes, shall be paid to the owners. Where a local authority does not use its power the Bill provides for their exercise by a superior authority, presumably the Ministry of Health. It would, perhaps, shorten matters if the Ministry were to set up a central house agents' office to deal finally with all claims. The working man might be asked whether he preferred accommodation in Mayfair or Hammersmith and then be driven round at the public expense to inspect any accommodation not at the time occupied. We do not think the proposal goes anything like far enough. We believe the working man should have a right to select from the wardrobes of everyone clothes not in immediate use, while it would be clearly fair that he should have the right to sit down at anyone's dinner table if the guests were late and seats unoccupied. We do not like these mean and grudging plans for helping the honest worker and should like to see Government taking steps which would really make him comfortable.

The R.I.B.A. Conference at Oxford.

A banquet in the Hall of Christ Church last Friday formed the culminating feature of what has admittedly been one of the most successful conferences the R.I.B.A. has held. After the usual loyal toasts had been duly honoured, the President proposed that of the University and City of Oxford, which was responded to by the Rev. R. L. Phelps, M.A., Provost of Oriel, in a scholarly and very witty speech. When foreign visitors asked what the University was, he had to fall back on its buildings; and those who had taken its degrees might forget what they had learnt, but the memories of its buildings formed their most lasting impression. The Mayor of Oxford, who responded on behalf of the city, roused much amusement by his vigour. He represented the city of Oxford, and his business was firstly, secondly, and lastly to maintain its interests—the University was well able to look after itself. He alluded to the trinity of interests represented in town, gown and architecture, and sat down after a speech which proved that finished oratory is not a necessary essential in pleasing an audience. The toast of the Royal Institute of British Architects and the Allied Societies

was proposed by Sir Herbert Warren and responded to by Mr. Paul Waterhouse and Mr. E. P. Warren. Mr. Waterhouse hoped that the University of Oxford would turn a deaf ear to those who would try to persuade it to modernise itself. If it did some other university would step into the gap left, but he thought that the modern field might be left to Cambridge and other rival institutions.

About 200 guests attended and among them were included Mr. J. A. R. Munro, Rector of Lincoln; Mr. F. W. Pember, Warden of All Souls; the Rev. W. A. Spooner, Warden of New College; Sir Michael Sadler, Master of University College; the Rev. L. R. Phelps, Provost of Oriel and Pro Vice-Chancellor; The Mayor of Oxford; Sir Herbert Warren, President of Magdalen; Sir Charles Oman; Mr. T. Bowman, Warden of Merton; Mr. F. L. Lys, Provost of Worcester; the Treasurer of Oriel, Mr. D. G. Hogarth; Miss Penrose, the Principal of Somerville; Professor J. L. Myres; Mr. John Keppie, the President of the Institute of Scottish Architects; Sir John Sulman; Miss Lynda Grier, the Principal of Lady Margaret Hall; Mr. C. H. Simpson, Principal of Brasenose; Professor A. D. Lindsay, Master of Balliol; and the President of the Society of Architects; the President of the Architectural Association and of the Allied Societies.

The Metric System.

Mr. Harold Cox, in the "Sunday Times," writes a well and clearly expressed plea for the adoption of the metric system for our currency and weights and measures. He urges that the advocates of the system have now abandoned the idea of dividing the pound into 1,000 mils in favour of a system which would keep our currency, with the exception of the penny, intact. Instead of the shilling being made up of twelve pence, it would after the change be represented by ten pence, a change which would probably allow for the reintroduction of penny postage, as what was lost on letters would be made up for on post-cards. The metric value of a column of pounds, shillings and pence would be arrived at by dividing shillings and pence by two: thus, £12 6s. 8d. would be represented by £12·34, and in this manner bookkeeping might be enormously simplified and time and money saved. There can be little doubt that if once our currency were reformed in this simple manner it would not be long before we scrapped our cumbrous and unwieldy system of weights and measures, which can only be remembered for a brief time by school children and by the few who are continually using them. The chief objection to reform is, and always has been, that there is no valid argument against it and no possibility of building up political controversy on such a basis. It might take old countrymen and countrywomen a few months to get used to the change, but that does not appear to us to be an overwhelming reason against it.

London Traffic.

We have been more and more impressed recently with the extraordinary congestion of London traffic, especially at street crossings, and we believe that it will be necessary before long to provide additional space at all important street crossings, in spite of the great expense thereby involved. When the great crossings have been converted into circuses of reasonable size it will be possible for traffic to follow the curve continuously without interruption or hold ups. It seems to us a pity that in the rebuilding of Oxford Circus the street frontages were not set back to allow for an adequate curve. Again, Parliament Square is an example of the improper utilisation of an adequate space which might be utilised in such a manner that all congestion would be eliminated, and this without the purchase of additional space. Our railway systems within the London boundaries are badly in need of replanning, but this is necessarily a far more difficult and complicated process, though there are many arguments in favour of extending the tube system until it forms a really convenient system of intercommunication between the terminal points of the main lines, and the traveller across London would continue his journey round London instead of having to cross its congested central area. This and the provision of non-stop tube trains which would only slow down when passing through stations, would make an enormous difference to traffic, together with the elimination of heavy goods traffic along certain thoroughfares except during specified hours at morning and night.

The National Housing and Town Planning Council and Housing.

We have frequently disagreed with the action taken by the National Housing and Town Planning Council in respect to housing, but there is one point alluded to in their last fortnightly "Record" with which we are in entire agreement. This is in their objection to the limitation of maximum measurements of accommodation, which we agree should be left to the discretion of local bodies. The function of the Ministry of Health seems to us to be to define and limit the amount of the subsidy to be given per house and thus protect the taxpayer, leaving it to the local authority to determine the exact sizes and nature of the accommodation to be provided within their areas. We have a well-known instance of the divergence of views in the matter of the height of rooms, fixed at 8 ft., which we in the South consider ample, not only in housing but in better class work. But in Scotland and the North of England a greater height is almost universally desired. We feel that the control authority is perfectly right to assume in arriving at costs that rooms of 8 feet in height are ample. But if a local authority thinks otherwise it should be free to authorise greater heights so long as the grant or subsidy is not increased. The same reasoning seems to us to hold with regard to the floor area to be provided, and even, we should say, to the provision of baths and other adjuncts. If in any area the provision of a bath was not regarded as necessary we do not see why in that area provision need be made for a bathroom and the scullery sink with a copper taken as a suitable equivalent. We have heard of baths in country districts whose chief use has been a storage place for potatoes, which can possibly be stored in a cheaper manner.

Waterloo Bridge.

Mr. C. W. Pettit has written a very interesting letter to "The Times" on the subject of Waterloo Bridge, in which he claims that the case may be readily dealt with by underpinning, and that in the opinion of competent engineers, one of whom reported to the Society for the Protection of Ancient Buildings, rebuilding is entirely unnecessary and all that is required can be effected at a small fraction of what the London County Council must spend on their scheme. This, if true, is extraordinary, for it must be assumed that the London County Council would only act if they had been clearly convinced by the highest authorities that rebuilding was absolutely necessary. A small Council or a private individual may easily make grave mistakes for lack of adequate information, but we should require very clear proof to convince us that a body like the London County Council were wrong in a matter of such cardinal importance. Public bodies are not as a rule indifferent about the ratepayers' interests, nor can the L.C.C. be said to have a Philistinish love for the destruction of historic London.

Waterloo Bridge Scheme Abandoned.

After a long debate on the proposed reconstruction and widening of Waterloo Bridge, the London County Council this week decided, on the motion of Mr. Herbert Morrison, M.P., to abandon that part of the scheme which provided that the new bridge should "preserve the character and identity of the existing structure."

In the course of the debate it was urged that it was useless to "tinker" with the bridge, that the roadway must be made wide enough to accommodate present day and future traffic, and that the obstacle to navigation of the river presented by the narrowness of the existing spans must be removed. In a further motion Mr. Morrison asked the Council to give effect to these considerations and to approach the Ministry of Transport for an "adequate grant" towards the cost of the work.

Ultimately an amendment, moved by Sir Cyril Jackson, was accepted, to the effect that the question of reconstruction of the Bridge, both from the point of view of road and river traffic, be referred to the Special Committee on Thames Bridges which the Council recently set up.

The position, therefore, at the moment is that, although the Council is still free to proceed with the construction of the temporary bridge previously agreed to, no steps can be taken with regard to reconstruction of the present bridge until the Special Committee has reported. In any case, as indicated above, the earlier intention of the Council to preserve the architectural features of Waterloo Bridge has gone by the board.

The Anglican Cathedral and College, Jerusalem.

George Jeffery, F.S.A., Government Architect, Cyprus.

ST. GEORGE'S CLOSE, JERUSALEM. THE CATHEDRAL TOWER, BISHOP'S PALACE AND ENTRANCE TOWER FROM THE SOUTH.

Some few years ago I visited Jerusalem, with an introduction to Dr. Blyth from the Archbishop of Canterbury. We discussed such plans as he had then formed for a permanent residence. On my return to Europe I made a design, of which the perspective view was exhibited in the Royal Academy. This design has been carried out.

An architect in the Levant, even at the present day, can hardly anticipate experiencing the usual conditions of the profession as practised in any civilised country or colony. In Jerusalem a curious condition of affairs prevailed twenty years ago, the Holy City was still an oriental town. The methods of construction were uninfluenced by modern or European ideas, the materials were purely local. At the present day this is all very considerably changed. Materials and methods of construction are imported by each of the communities which represent all the countries of Christendom, to be used as far as possible in the ways of their respective places of origin, but underneath all these must, of course, always survive a certain undercurrent of local character and style, owing to the necessary employment of native labour.

The general appearance of the buildings, the Bishop decided, should be thoroughly English in style. Here it must be noted that all the traceried windows and other more essentially stylistic details of the buildings were executed from my designs in white marble at Carrara. I found this much easier and cheaper, even with the addition of the transport, than endeavouring to get the work done locally even in ordinary stone.

The style adopted for the buildings met with serious criticism on the part of the local authorities. The small battlemented parapet which is so familiar to European eyes, and perhaps conveys the most peaceful of associations with studious colleges and old world country houses, seems to have a very contrary effect on the Levantine mind. I was one day informed with all official importance that such things were not permitted within the Turkish Empire, and that I must forthwith turn the battlements into a balustrade, which would suit my building quite as well, if not better. This was accompanied with the usual caution to the workmen not to carry out the foreigner's ideas under penalty of being locked up. This was, however, got over after much palaver and certain substantial arguments.

In Jerusalem each nationality is represented, especially in the churches, by a style belonging to its own race and culture, and any attempts to make use of Eastern or "Saracenic" characteristics suggested by the Alhambra, or the mosques of Cairo, generally turn out to be egregious failures—as witness the great English church at Alexandria.

The great Russian buildings have a special interest because the local types of Petersburg, Kieff, and Moscow are represented. The French schools and hospitals are merely utilitarian, carried out with the deplorable means of native labour. German work, on the other hand, is terribly pretentious, and is evidently designed in the "Style Nouveau" rather than in any sober tradition of the Fatherland.

Amongst all the strange developments of the Holy City during the past half century the Anglican College stands as a quiet corner of old England, neighboured on one side by Polish and Bokharist Jews' colonies with their Russian or Asiatic characteristics, on another by a colony of American "Adventists"; and on a third by the French Dominicans with their strange looking church of St. Stephen. The difficulty of forming part of such a picture in any satisfactory way must be evident to most people.

In the Levant there is nothing resembling the "building trade" of a civilised country, with its technical craftsmen and supply of local materials. The mystery is how large mosques or public or government premises come into existence. The usual system and procedure seems for the employer to design the building himself, as architects are not recognised, and for such modifications to take place in the course of the work as may be suggested by any casual mason or labourer who may be employed from time to time. During the progress of the works the employer or his confidential agent usually sits on a chair close by from morn to eve, smoking the inevitable *naghele* and disbursing the small payments demanded of him, not without considerable wrangling, by the workpeople. Such a system may lead to a considerable degree of originality of a kind, but certainly does not conduce to sound building construction or to beauty of design. No plans are ever made, and consequently no very intelligible estimates are ever arrived at; a building stands unfinished for years owing to the owner having spent all he possesses without calculating the amount required for finishing it. Formerly it was the custom for a mason to make a rough tender for work at so much per "vault"; that is to say, the area which can be covered conveniently with a domical vault, of an average size of about sixteen feet in each

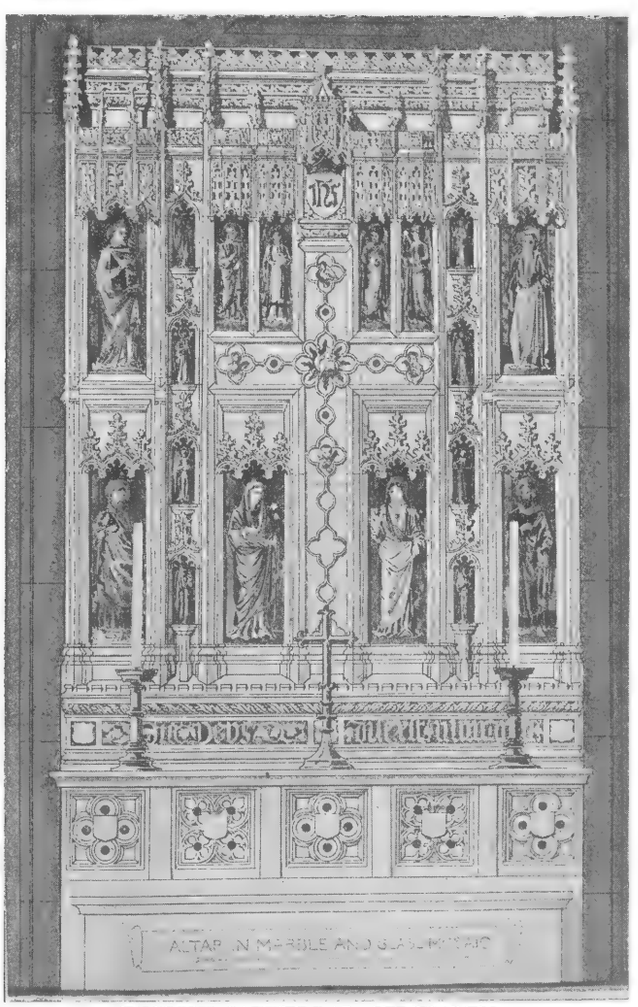
ENGLISH CATHEDRAL, JERUSALEM: THE FONT, "THE GIFT OF QUEEN VICTORIA."

direction, this vaulted space was taken as the unit of the whole construction—it must be remembered that no wood was ever required for roof or floors. The sum usually demanded for each vault was, in my time, forty napoleons, provided the foundations were of a small depth, a deduction being made when the walls divided one vault from another. This curious mode of estimating builders' work was not unknown in Europe during the Middle Ages and especially for the construction of vaulted churches.

In making arrangements with the masons I agreed upon a compromise between native and European ways in estimating and executing the projected building. As the church could not be considered from the point of view of a series of domical chambers, we agreed to calculate the work at the value of one napoleon per cube metre of masonry, inclusive of all labour and materials. The foundations had to be carried down to the live rock everywhere, and in places, as the site had been used for a quarry in former ages, we were obliged to excavate to a depth of between four and five metres before we could reach a solid surface, or begin building the massive stone walls. These immense excavations were, of course, very costly done in the native style, with the aid of mere garden hoes and straw baskets; the time consumed was very considerable, and I used to find the whole process the most wearisome experience I had ever undergone. Some economy in this part of the work could be practised by making use of the immense dug out spaces in which to construct cisterns. For instance, the greater part of the west wall of the church is carried down to form one side of an immense cistern which lies beneath the eastern gallery of the cloisters, and measures some twenty metres in length by five in width. This cistern, which is connected by pipes with the greater part of the buildings, affords a presumably inexhaustible supply of water for all the purposes connected with the Bishop's house by means of a force pump. The building of cisterns in Jerusalem is a matter of the most vital importance to the community. It is, in fact, the preliminary operation in setting up a new house, and on the planning of the cistern with economy depends usually the emplacement of the subsequent building. The water supply of Jerusalem depends almost entirely on the winter rains, and consequently the construction of cisterns has been an art of a special kind practised since the most remote ages.

The sites of the walls of the church had to be very carefully considered; the trenches were intersected by ancient graves, which had to be explored for fear of unknown possibilities. On such sites close to an ancient city like Jerusalem, one never knows what may be found accidentally beneath the surface. On the Anglican College site I noticed evidences of quarrying, of tombs of several distinct kinds, and remains of the marble mosaic floors of ancient churches or houses. One of these mosaic church floors, of small white stone cubes, with a very simple diamond shaped pattern, I was able to have reset as the floor of the small "morning chapel." The floor of the Cathedral contains one fragment of antiquity found on the site, and how many tombs may still remain beneath the buildings is unknown.

Our ancient cathedrals in England are mostly monastic churches in their origin, adapted to the purposes of the Reformed Religion. The English cathedral of modern days is usually planned more on the lines of a large parish church, when it is not an old parish church made use of for this purpose, such as Wakefield or Newcastle. I was induced to design the new church in Jerusalem without much regard to any particular cathedral type, my ambition being to construct a practical Anglican church as well as space for the large schools founded by Bishop Blyth, and a considerable regular congregation.



ENGLISH CATHEDRAL, JERUSALEM.
Altarpiece in White Marble and Venetian Mosaic.

Town Planning in a City like Oxford.

Extracts from a Paper delivered by Raymond Unwin.

Authorities seem generally agreed that Oxford was an important city by the end of the ninth century; while it was not until the end of the twelfth or beginning of the thirteenth century that the gathering of teachers and scholars, that developed into the University, assumed such importance as to exert an effective influence on the life of the city, or to become a rival authority to that of the municipal government. From that period, however, the University seems to have grown rapidly in power and authority. Gradually, not without fierce and sometimes bloody conflict, aided by the King and the Church, it established so complete a control that the commercial development of the city on independent lines was arrested, and the town of Oxford gradually became more and more occupied in the housing, feeding, clothing, and supplying the other material wants of the Ecclesiastical Orders, the students, and their teachers, who made up the University. Only in comparatively modern times, and in some respects within the memory of many of us here, has the city of Oxford recovered complete municipal autonomy, and there are fields of jurisdiction which are still shared with the Vice-Chancellor and Proctors.

These two distinct and fully developed branches of life, the University and the Commercial Town, are still the most notable characteristics. Their different needs and the extent of their mutual dependence constitute some of the most fundamental considerations affecting the town planning of the city.

There have been many changes here during the last half-century since the days when as a boy I first learnt to love the place and its buildings, shared its rich opportunities, heard something of beauty from Ruskin and of civic duty from the liberal-minded rector of Carfax Church, long ago removed. There has been a great growth of mutual understanding and respect on the part of the City and the University. Ardently as anyone familiar with Oxford in the seventies must wish that it had been possible then to obtain the protection and guidance of a town planning scheme, I am not sure that at that time it might not have been difficult to secure the degree of understanding between Town and Gown, and the harmony of aims in regard to the city, which are essential to the working out of a good plan for its future development. To-day there is every reason to hope for hearty co-operation in this work.

Oxford is not alone in that its town planning problems are peculiar. Every city has its own special conditions and needs. One may say of each great city that it has a character, almost a personality, of its own, which the town planner should seek to preserve and develop. But of few cities are the special circumstances so important, and the character so unique, as in the case of Oxford; consequently they should be a dominating influence in the planning of the city. There are university cities in which the town is so large and important that the university exerts little appreciable influence on its development; there are others in which the town is so small that its chief function is, and is likely to remain, that of ministering to the material needs of the university. Oxford is in a very different position. Here the city is the older partner; it has a long and honourable history. On many occasions it has been chosen as the seat or refuge of the English Parliament. Before the University was constituted the town had intimate connection, almost on a footing of equality, with the City of London. The City Fathers have been brought into relations of special loyalty with several of the Kings and Queens of England. The town has, indeed, a life history and a personality of its own. At the same time, its relation to the great University, which has an equally glorious past, and an even more world-wide reputation, has been one of the greatest interdependence and intimacy, not always free from strain or jealousy. The ties which unite the two resemble, perhaps, the union and the bonds of matrimony. Such a relationship will not be permanently harmonious on the basis of the subordination of either party, but only on that of mutual respect and understanding, on a right appreciation of the importance of the different functions which each has to perform, and a due acceptance of the limitations which their relationship and their dependence on one another must impose on both alike.

When we consider that this dual life of such exceptional interest and value is housed in and about an ancient city, which, as a mere collection of buildings of interest and beauty, constitutes one of the greatest and most highly prized treasures of the world, we shall begin to realise something of the difficulty, and something too of the fascination, which the preparation of a town plan for Oxford and the surrounding lands will present. In the joint working out of this plan, we may confidently hope for a further advance of that mutual appreciation between the University and the City which has already made so much progress, since the time when T. H. Green, of Balliol, made the encouragement of good understanding between these two bodies one of the aims of his life.

We may confidently expect that in making their plans University and Municipality alike will cheerfully recognise the duty which they owe to mankind to preserve from injury the unique beauty of the city which they have jointly inherited. Sharing the respect and affection for their common home, they may be relied on the more willingly to put up with such comparative inconvenience as may be necessary to conserve its character. As it becomes urgent to solve the problems which progress brings up—problems of congested traffic, of expanding commerce, of modern requirements in sanitation, and the like—before adopting any solution dangerous to the existing beauty they will search diligently for alternative methods, seeking each time to find the way out of or round their difficulties which will best harmonise with the *genius loci* so highly treasured.

Let me heartily congratulate the City Corporation and their officials on the steps already taken. Instead of being content with a small scheme for the unbuilt-on area within the city boundaries, they have taken a more adequate view of the area which is intimately bound up with Oxford, and have realised that the built-up centre of the city is vital to the scheme. Authority has now been given by the Minister of Health for a scheme to be prepared for practically all the land within a radius of three miles from Carfax. At no distant date a preliminary statement of the proposals will be called for. It will be realised that town planning on this scale is no mere scheme for developing a few housing sites, as some seem to think. On the other hand, it is no scheme for stereotyping in detail the planning of all the sites within that vast area.

Nor is a town planning scheme a preliminary measure to the enlargement of the borough boundary; on the contrary, while it secures co-operation in planning, it leaves full autonomy to surrounding authorities in administration. Town planning is, in fact, the application of imagination, skill and foresight to direct and guide the future development of the area, instead of leaving it entirely to the mercy of the haphazard play of individual interest or caprice. It consists in looking ahead, studying the growing requirements of the district, foreseeing the dangers which threaten, and making a general plan of the main lines of development which will best provide for the growing needs, and avoid danger to the existing city.

Increasing traffic I imagine to be one of the most threatening dangers. You share this difficulty with all modern cities, but whereas most of them are still obsessed with the importance of providing more and more facilities for an ever-growing volume of movement, you, I hope, will first seek to discover how far it may be practicable to abate the swollen stream which already threatens to flood your central area. You will inquire whether some of it may be directed into new channels, and so carried harmlessly round the threatened district. Even more important, you will study how needless movement to and fro may be reduced by a better location of the people and the places to which they chiefly resort.

For this purpose you will investigate the various causes of traffic congestion and the way in which they may be controlled. The increasing multiplication of motor vehicles of all kinds is one of these causes, of which we in this country have not yet experienced the full force. It is well to realise that already in America there are cities in which the multitude of motor-cars in use afford seats for the whole population, who could thus empty the city and all go riding at once if their roads would accommodate them.

Must we anticipate such a condition in Oxford? I trust not; but long before we approach that state, which means one motor-car for every four or five persons, or even approach the general American average of one car for each ten people, it will become essential to decide whether Oxford must be sacrificed completely to a passing craze for incessant movement. It may well need to be considered, and that soon, whether complete freedom to race about the city in a car is so important a privilege for all the undergraduates that much of the unique character of Oxford streets should be sacrificed to render such form of amusement reasonably safe for the public. Several alternatives are conceivable. The University may well find it desirable within its precincts to restrain this tendency to perpetual movement, in the interests of academic pursuits.

Even such a drastic measure as the re-erection of the City Gates on the four main highways, to protect the town against this new invasion, might become justified as an alternative to such vandalism as a widening scheme for The High!

As regards the main highways, their position was largely fixed by the conditions of the site. The shape of the gravel plateau on which the city was built, its relation to the two adjacent rivers, to their fording places and later their bridges, determined

that the two main streams of traffic would cross at or near the centre of the town at Carfax, and that the two highways thus formed would be the chief traffic routes. Indeed until recent times they have been the only important routes.

We do not know to whose early architectural instinct the rectangular crossing at Carfax is due. Some have seen in it a Roman relic; but the Romans had no monopoly of the right angle. It seems likely, however, that we owe the extraordinary beauty of the curved High Street to the necessity of accommodating the line of this eastern arm of the cross roads, so that the fording place, and subsequently the bridge which passes the low-lying river valley at its narrowest point, might be approached from a direction normal to the line of crossing. A somewhat similar, though much slighter, change of direction in the southern arm gives the fine view of Christ Church and Tom Tower from Carfax itself.

The very acute angle at which the Woodstock and Banbury roads approached the Northern Gate, where the old St. Michael's Tower still stands, gave to the city its unusually spacious St. Giles, one of the earliest parts outside the wall to be built upon. It is to the protecting moat or ditch outside the North Wall, and the wide space there kept free, that the modern city owes its Broad Street. Unfortunately the continuation of this along Holywell and Long Wall Streets was carried out to a less generous width. Consequently this street is not so adequate as might be wished to serve as a by-pass road from St. Giles to Magdalen Bridge, though it serves this purpose to some extent. In view of the necessity of limiting the volume of traffic in the central area, the question of diverting as much as possible along by-pass roads is of special importance when planning any new roads here. It is important, for example, that through traffic from the north, as well as that between the northern suburbs of the town and those east of Magdalen Bridge, should be enticed from passing through the centre of the town by the provision of alternative routes. Equally important is it to improve communication between that part of the town which lies north of Broad Street and the railway stations, or the towns and villages which lie beyond them. Such traffic should be discouraged from coming farther into the town than Beaumont Street. This is fortunately a fairly wide thoroughfare, and it may be practicable to improve the present route from its western end to the stations. I am glad to see this question of by-pass roads has already received attention, and that roads farther out are projected, with a view to diverting both through traffic and that between the outer suburbs of Oxford, which might otherwise have to pass through the centre.

Owing to the position of the rivers, parks and other features obstructive to road-making, the planning of these highways is not without considerable difficulty; but if Oxford continues to grow their advantage will be increasingly realised, and I am confident that you are justified in making great efforts to preserve the best possible routes for these roads. Do not be too much deterred by the fear of costly bridges; we are apt in modern times to forget or to despise the humble ferry, which is still so effective a substitute on many a wider river. Where on your projected roads the cost of a bridge may not be justified, a ferry may prove a very serviceable substitute for many a year.

Apart, however, from planning or making new roads, there are other means which you can take to check the growth of centralised traffic. In this country we have not yet general town planning powers applicable to the built-up areas of our towns; but you in Oxford have such a unique collection of special buildings, of historical interest and of beauty, that practically the whole of your central area has been deemed to come within the clause passed to meet such exceptional cases in the Housing and Town Planning Act of 1923. While the powers conferred by this clause may not enable you to do all that may ultimately be found to be desirable, they do carry you a long way, and include among other things the regulation of the height and character of buildings. I would ask you to consider carefully how far you may be able to use these powers to prevent an increased density of building in the central areas; to check the increased occupancy of sites for business or other purposes which will stimulate traffic in the centre; and to limit the heights of buildings on sites already occupied for business purposes. It has not been sufficiently realised how greatly the increase in height of buildings adds to the volume of traffic in the adjacent streets. This is brought home to one very forcibly in studying American conditions, where one may find the population of a small town occupying one lofty building and owning among them over 1,000 private motor-cars. Obviously, if the population increases, the volume of trade and business must increase also. If it is not practicable to bring the increasing population to the existing shops, the alternative is to take the shops to the people. The development of new shopping centres conveniently placed to serve suburban areas, where a market of sufficient size can spring up, is a perfectly practicable alternative to continued concentration. Such business centres may consist of branches from the existing city stores or of independent shops, and can be encouraged by proper provision and planning of areas for the purpose. By serving all the ordinary daily needs of the residents they will greatly relieve the pressure on the centre.

Traffic in the central area can be further diminished by localising as far as possible in the different suburbs all the functions of daily life except those few which depend on opportunities or conveniences which are only to be had in the city. You have here more than the usual share of such opportunities; and that the proper enjoyment of them may be open to all, you will naturally wish to provide the necessary traffic facilities. But in order that all the people of your expanding town may have the opportunity to enjoy these special privileges it must be realised that, as a necessary corollary, the use of the central area for those other purposes which can be provided for locally in the suburbs must be discouraged. If the tendency for the expansion of business and trade in the central area is encouraged, or even permitted without some attempt to counteract it, I fear that the opportunities and the amenities which constitute the Oxford which we all love will ultimately be so overlaid and congested as to lose their value. This is not inevitable; and the most effective way of checking it is to make provision, by careful forethought and planning, for the proper distribution of the increasing population in self-contained suburbs outside the town, and to equip them as completely as possible for all the activities of life, for industry, business, trade, education and recreation. To the full extent that it may prove possible, all these functions should be localised with the people to whom they minister.

This is a field of development affording ample scope for the town planner and the architect. Make your suburbs so attractive, so well equipped with modern conveniences, so convenient of access, so economical of cost and labour to live in, that the people will be enticed there and the undue pressure which threatens central Oxford will be relieved. We cannot do much by compelling people; a little by regulation to level up the general standard and guide progress on lines fairly well established perhaps; but we can attract people, make the path we want them to follow easy and pleasant, and they will readily tread therein. In too many of our towns, I am sorry to say, we are glad to encourage our architects and builders to remodel and rebuild; here in Oxford our colleagues of former days have builded so well and left us such a store of beauty that we can only beg the citizens to hold their building zeal in check, spare as long as possible these prized relics of the past, and preserve for us fair opportunities to see them.

This site for the city was chosen largely because it was protected by the Isis and the Cherwell, and by the green girdle of low-lying meadows along their banks: meadows which, in addition to affording ideal playing fields for the English games and luscious feeding for the cattle and geese of the Freemen of the city, served for generations as a foreground and frame to the vision of Oxford. It has been reserved, I am ashamed to say, to my generation largely to obliterate that foreground and vulgarise that frame. I urge that what remains of Oxford's green meadow girdle should be strictly reserved. It is the least healthy part of your area to build upon; it is the most difficult and costly for drainage; I suspect that the more it is built on the greater will be the danger of sudden floods. These are sound practical reasons for preserving the low-lying land from further building. But if there were no such reasons, I should still urge with equal emphasis that Oxford is worthy of its setting, that the picture is fine enough to deserve the most appropriate frame.

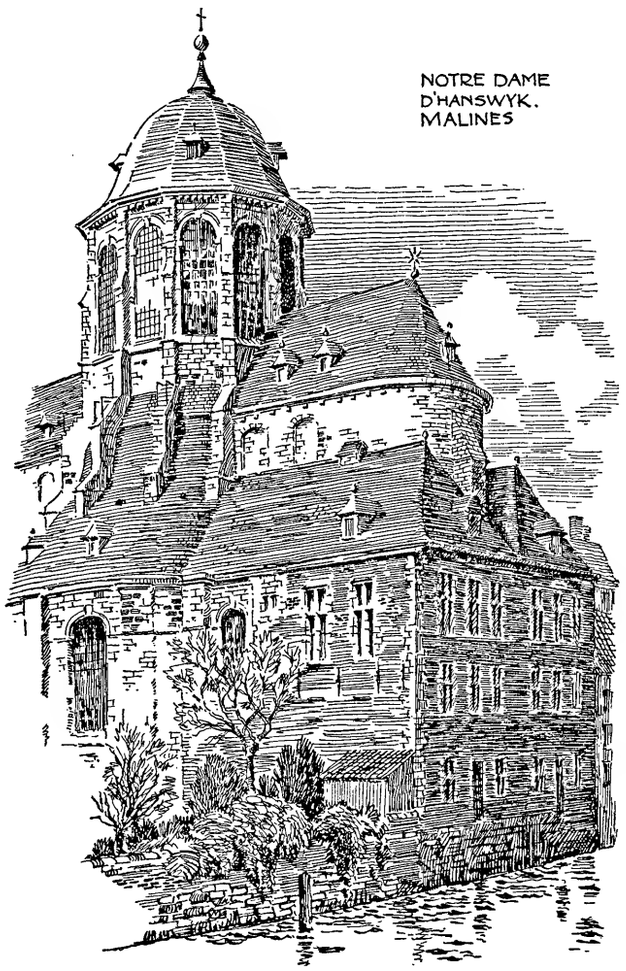
What is true of the vision of the city, as a whole, is true also of many charming vistas within the city. Much may be done to preserve these and to protect their setting. It is not enough in this respect to have regard only to the buildings of outstanding merit—the colleges, churches and the like. These may be preserved in themselves and yet be largely destroyed by replacing the harmonious background of simple but charming buildings, which were so common here fifty years ago, by blatant or merely incongruous examples of the modern lack of taste.

New views and vistas may also be created. But this is a pursuit to be followed only with great care and caution. Many a Continental city which has cleared away old buildings, thought to obscure the view of something specially fine, has bitterly regretted the clearance, and even in some cases tried to replace that which had been demolished.

We are here to-day as a gathering of architects. It is the peculiar function of the architect to unite the useful with the beautiful, to study scientific construction, to consider the practical requirements, and to satisfy them in beautiful form. If he is a true architect his thought has been trained to work along both lines and to seek for the synthesis between their demands.

Malines and Louvain.

By P. M. Andrews, A.R.I.B.A.



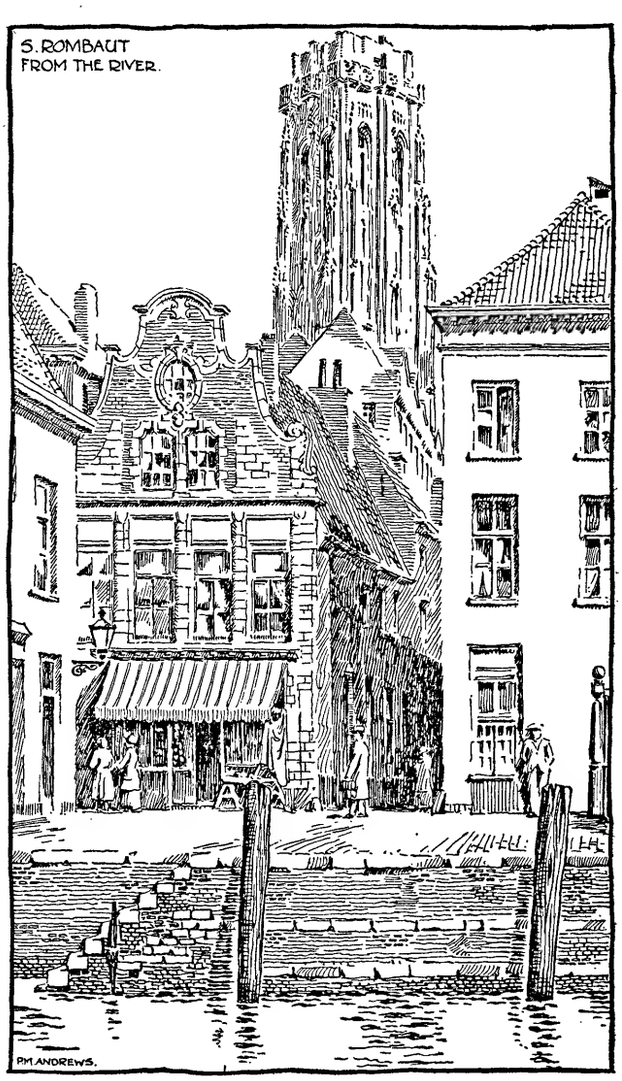
Malines and Louvain both suffered severely in the opening month of the war. The area of country, in which these are the two principal towns, seems to have been subjected to a systematic terrorism and formed part of the policy to overawe and subdue the subject population. Though the damage at Malines was due to bombardment, that at Louvain was by deliberate incendiarism, and this wanton act of destruction sent a thrill of horror and dismay throughout the civilised world.

The work of reconstruction has been and is being carried on with surprising energy, considering the many adverse elements with which the Belgians are confronted. All the principal business houses and streets have been rebuilt, shops reopened and trade has largely resumed normal activities.

The old mediæval plan of the city has been preserved and the motive that influenced the builders seems to have been the same as that which operated in the case of our own city of London after the Great Fire. The plans of these Belgian towns have been evolved from the principle of a centre of civilisation from which roads radiate in various directions to other similar centres, rather than settlements on pre-existing cross tracks. Hence abroad we have the circular plan, frequently circumscribed by canals as at Bruges, whereas at home the plan has grown up round one long street or cross roads as at Chichester and Guildford. In Belgium the focus of the city is the Grand Place, to which all the streets lead, but it was an axiom with the mediæval town planners to avoid axial lines and long vistas. Traffic was never a problem with them. The result of this method is picturesque and homely, rather than architecturally impressive, and is greatly enhanced by the elaborate exteriors of the more important buildings, together with the beautiful colour and texture of their materials.

Now, however, the new buildings that have arisen are very far removed from their predecessors, and however much we may admire the promptitude with which the work of reconstruction has been accomplished, it is impossible to look upon them as ranking high in the category of modern civic architecture. In most cases, particularly at Louvain, the new streets exhibit a modernity and mediocrity without individuality in design or boldness in construction. Whole areas of this town, including the Avenue des Alliés, the principal street leading from the station to the Grand Place, have been laid in ruins, including the Grand Place itself. The only important building which escaped destruction was the Hotel de Ville, which in the early days of the war achieved considerable notoriety. This was erected in the middle of the fifteenth century and is a good example of the florid Gothic so popular with the Flemings of that time. It compares unfavourably with most of the other civic buildings of Belgium, lacking both the massive dignity of the Cloth Hall at Ypres, and the daring originality of the Belfry at Bruges. It is entirely covered from plinth to parapet with tracery, niches and figures, and the two gables are finished both at base and apex with open traceried spires. These impart an air of lightness and unsubstantiality wholly unsuited to a building of this character.

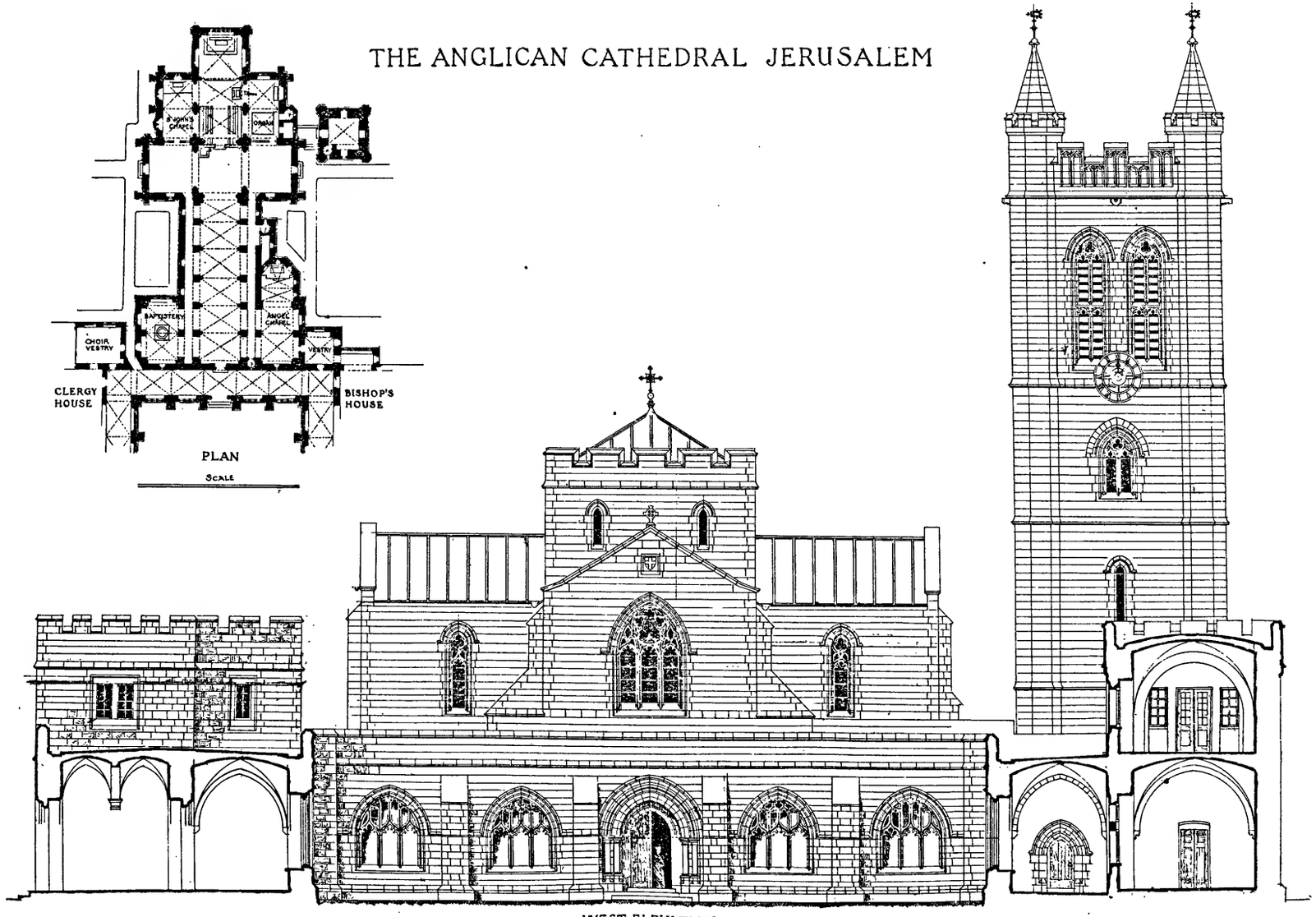
The church of St. Pierre, though never finished, takes its place with any in this part of Flanders and its almost complete destruction is an act of vandalism not to be condoned under any pretext of war's necessity. It is now undergoing complete restoration and we can only hope that it will be not quite so complete as in the case of the Hotel de Ville. The roof was entirely destroyed, including the later dome over the crossing, and the nave was burnt out. A new steel roof is being erected, which will be completed



THE ANGLICAN CATHEDRAL JERUSALEM

PLAN

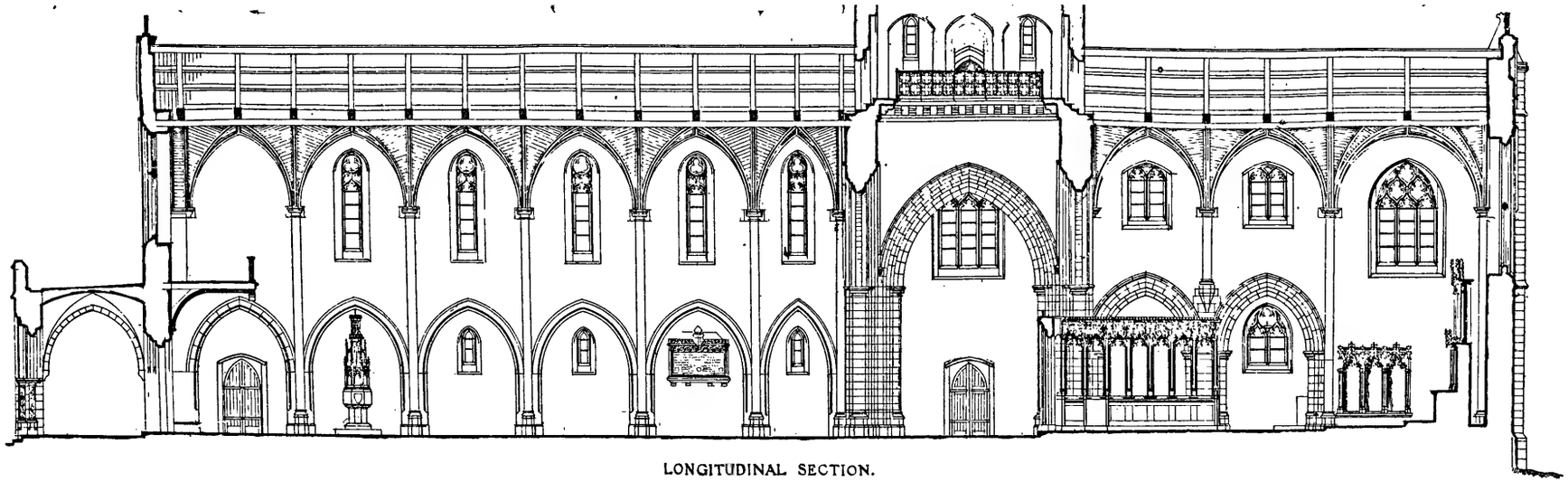
SCALE



WEST ELEVATION.

SCALE

0 5 10 Metres.



LONGITUDINAL SECTION.

SCALE
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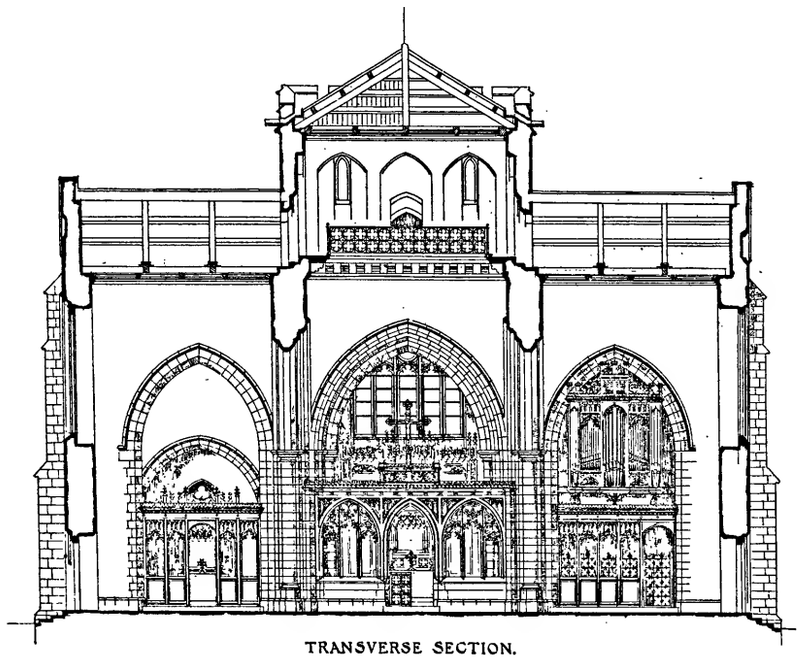

TRANSVERSE SECTION.
THROUGH TRANSEPT.

SCALE
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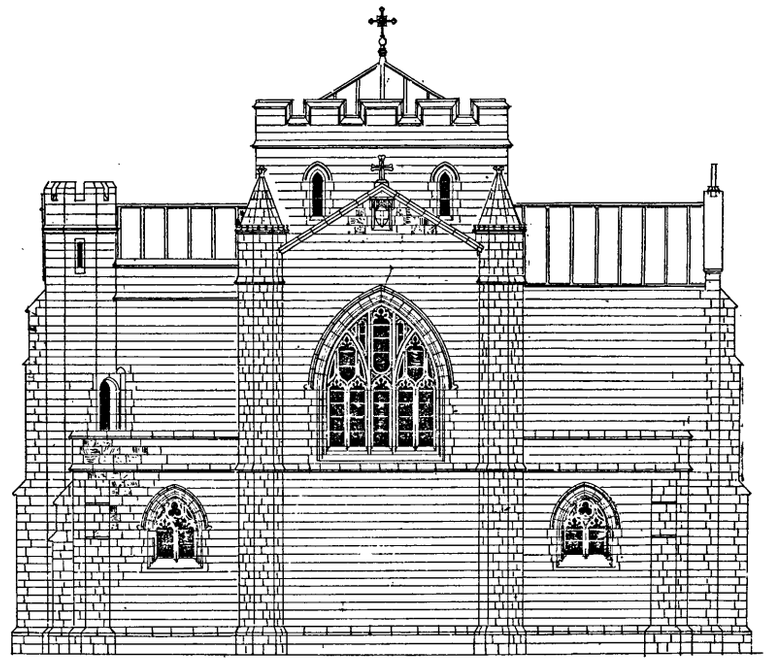


EAST ELEVATION.

"PHOTO-LITHO" WM BROWN & CO. LTD. LONDON, E.C.3.

THE ANGLICAN CATHEDRAL. JERUSALEM.

GEORGE JEFFERY, F.S.A., GOVERNMENT ARCHITECT, CYPRUS.

DINING ROOM, RUSSELL

SIR ASTON WEBB, P.R.

"BALLARDS," ADDINGTON.

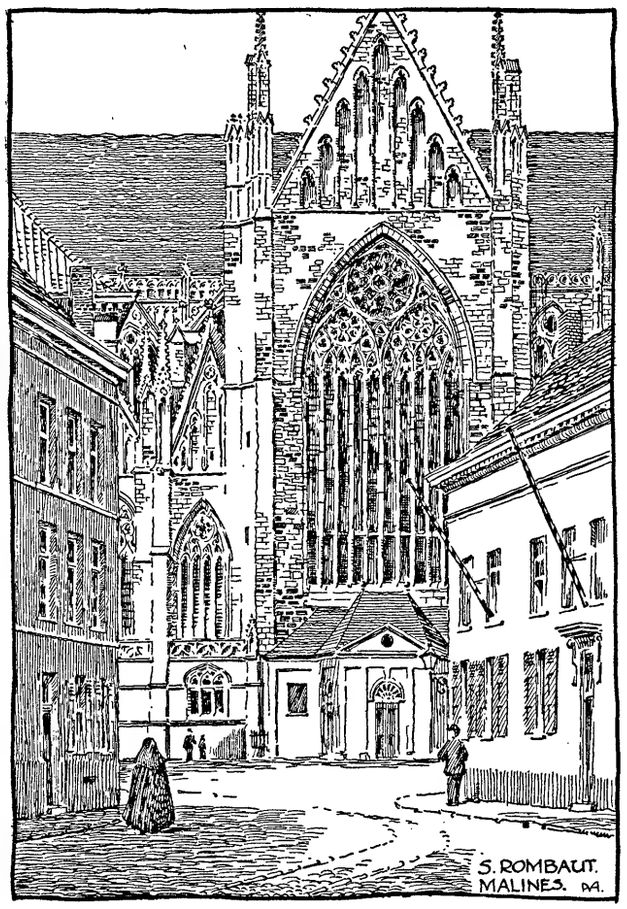
RICE E. WEBB, ARCHITECTS.

ENTRANCE FRONT OF THE RUSSEL

SIR ASTON WEBB P.R.A. AND

SCHOOL "BALLARDS" ADDINGTON.

MAURICE E. WEBB, ARCHITECTS.



in a few months, and the dome is being replaced with a steel flêche, thus reverting to the original design. Fortunately the choir, including its beautiful wood fittings and pictures escaped destruction.

Now, thanks to one of the clauses of the Peace Treaty, the Diereck Bouts altarpiece can be seen in its entirety. It was confidently asserted by the Belgian delegates at the Peace Conference that this picture had been wantonly burnt by a German officer during the destruction of the town, and in compensation the delegates demanded that the wings of this altarpiece, sold years ago, together with the Adam and Eve from the Van Eyck altarpiece at Ghent, should be handed over. It was subsequently discovered that the Diereck Bouts had not been burnt at all, but had been saved by a German officer and given to the Burgomaster, who had had it walled up in the vaults of the Hotel de Ville. It is now back in St. Pierre, together with its wings. The Germans committed quite a sufficient amount of vandalism without it being necessary to credit them with apocryphal crimes.

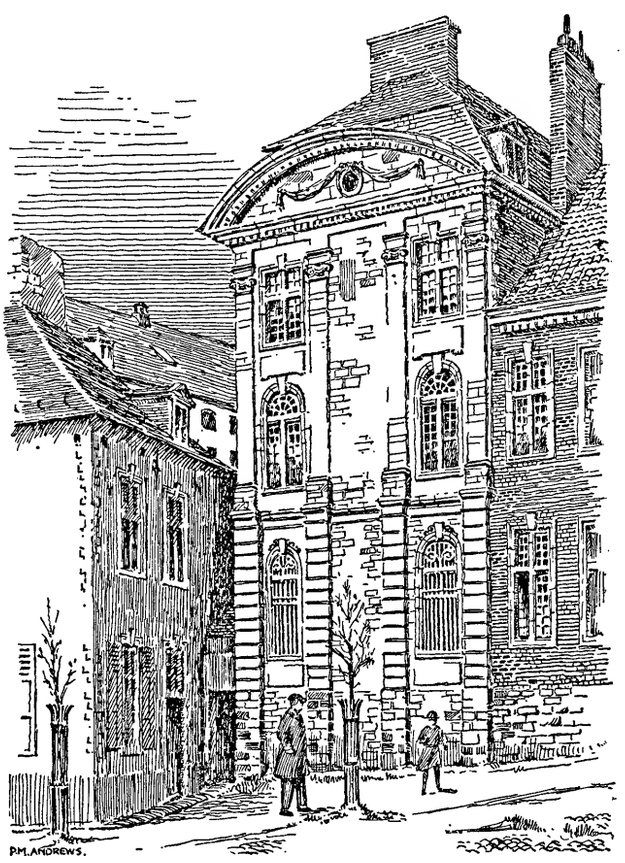
Little remains of the University, and the destruction of the library, including its priceless manuscripts, was one of the worst aspects of this act of barbarism and quite justifies the Belgians in demanding the return of their pictures. The Cloth Hall, built early in the thirteenth century and assigned in 1679 to the University, was a splendid example of the earlier Gothic and formed an agreeable contrast to the Hotel de Ville opposite. It is now ruined and the rebuilding that is in progress will not help us to visualise its former glories.

The destruction at Malines was not on such an extensive scale as at Louvain, although it was bombarded on three separate occasions. Here again the town has risen from its ashes in the same surprising manner, but in many cases with the same poverty of design. The magnificent cathedral of St. Rombaut, the metropolitan church of Belgium, still stands substantially the same as before. The tower, 320 feet high and still unfinished, has been repaired in a sympathetic manner and the use of steel and reinforced concrete, so conspicuous at Louvain, is here happily absent. Minor damage was done to the interior and a good deal of the glass was smashed, but to judge from remaining fragments this is hardly a calamity. The most serious damage occurred in the choir, where the present temporary brick filling indicates the extent of the damage caused by one shell bursting on impact.

The whole church is on a stupendous scale and its proportions are as fine as St. Gudule at Brussels. To judge from the model inside the church, the present tower represents about half what was originally intended, its complete height being about 550 feet. It is difficult to imagine what such a colossus would have looked like, and one cannot very much regret that it was never carried out. As actually left, it is in perfect proportion with the rest of the building and in outline and mass is unsurpassed. The famous clock, a replica of which is worked in the stone paving of the Grand Place, measured 45 feet in diameter, but it is now merely a tangle of rusty iron rods with one or two gilt letters precariously fixed against the stonework.

The interior suffers from the lavish use of plaster, a defect common to many of these churches, and the stone joints which would help to give scale to the building are

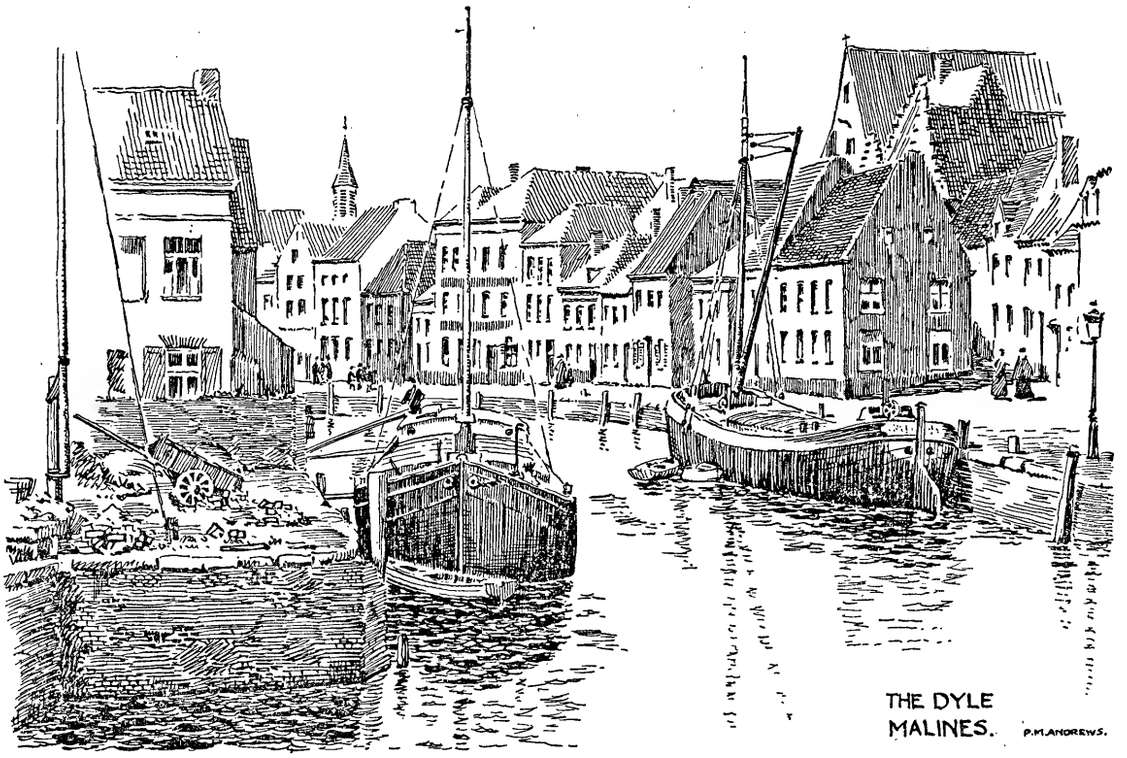
LOUVAIN. COLLEGE OF POPE ADRIAN VI.



entirely hidden. The nave and transepts date from the thirteenth century and the chancel from the fourteenth. The nave arcade is particularly effective, consisting of great circular pillars on octagonal bases with, originally, simple uncarved caps of an almost Romanesque character. Now, unfortunately, the bluish grey stone of which they were built is all hidden under plaster and the caps have been decorated with naturalistic ornament of the same material. The great statues of the Apostles, so dear to the eighteenth century ecclesiastic, detract not only from the pillars but disturb the vertical lines of the church and tend to reduce the scale.

The carillon is now all in order again and plays merrily all day and all night, and whatever charm it may possess during the day is all dissipated at night, at any rate after midnight.

Malines is full of quaint and picturesque streets and corners, especially along the banks of the Dyle, and those who are weary of sketching the Quai Vert at Bruges would



do well to put in a few days here. Brickwork is used chiefly as a filling and the wonderful skill of the bricklayer, so noticeable in Western Flanders, is here of a more prosaic order, where stone is more easily obtained. The combination of the two materials as well as the fine old timber-houses on the river side all add to the interest and should make this town a centre for the artist.

Partnerships Between Architects.

Partnerships between architects have their advantages and drawbacks—drawbacks which are perhaps more strongly evidenced than those in ordinary business partnerships, since temperament has stronger sway and produces more acute situations than occur in matters which can be judged by purely business standards.

One form of partnership—and perhaps the commonest of all—is between the man who obtains by influence or social ability and skill commissions and the man who carries out the work and is the possessor or exerciser of æsthetic skill. The danger of this is that the partner who secures work and who, in most cases, comes into intimate personal relations with his clients is in many cases working from a platform he could never reach by his own unaided efforts, while his partner's skill in design is in many cases attributed to him and he secures a position in which, if he is not thoroughly loyal, he can reduce his partner to the condition and status of a privileged assistant and one who in some emergency or other he may decide to dispense with. It is also inevitable that because his energies are directed towards obtaining work he should magnify the importance of what he does and underrate assistance which has in reality been the means of securing a strong position.

Another and common form of partnership is that which is formed between two men of more or less equal designing powers and capabilities and of this nature are many of the competitive partnerships formed between younger men who have no definite clientèle but who, together, can secure opportunities open to neither by their own unaided efforts. In most cases of this kind a natural cleavage of function takes place, one partner excelling in planning and general conception and the other in æsthetic power of design and often skill in draughtsmanship. The danger of this form of partnership is often that sharp difference of opinion may occur in which neither partner finds it easy to give way to the other. In many cases also hard times bring about acute financial conditions which either partner may consider are accentuated by the want of skill or energy of the other, while frequently difficulty arises because one partner considers he is giving more time and concentrated attention to what is a joint concern than his associate and is, so to speak, carrying him on his back.

Then there are the partnerships between men whose association consists of an arrangement to pool profits, each partner in reality carrying out an independent practice with the aid of a joint staff and very occasional collaboration on disputed or difficult points. Frequently each of such men is a specialist in certain branches of design and the execution of the work of both is allocated accordingly.

It will be usually found somewhat impossible for two men to work together unless they can jointly agree that in certain work one or other of them exercises a preponderant influence in matters concerning that work. Two architects can seldom work comfortably abreast on the same job, but they can by arrangement decide who should lead and who follow in that particular case, and on a clear recognition of this harmony usually depends.

There are certain men who cannot work in partnership with a reasonable chance of success. The lazy and the industrious men make an impossible combination unless the former has an unusual amount of influence. Two men of very different æsthetic bias can seldom combine with any degree of comfort or mutual convenience.

The man whose mental disposition induces him to calculate from day to day what he is obtaining through his partner's efforts and what his partner is getting by his efforts should not dream of entering into combination. The effect and advantages of combination can only be tested over considerable periods of time and both men should avoid pulling up roots to see how one plant is growing.

It is usually inadvisable for either partner to drop out of the sight of clients. We do not mean to say that in many cases an architect would not be perfectly safe in trusting to his colleague's loyalty, but there is always the possibility that his partner's death or some such contingency would leave him stranded.

The safest partnerships are naturally those in which both partners have equal success in obtaining work and both have skill in carrying it out, though that skill need not be in the same direction—in fact, it is best if one man's powers dovetail into his partner's deficiencies in some particular directions.

The architect who wishes for purely personal *kudos* rather than for success in itself will be seldom well advised in entering into any partnership arrangement; it is gall and wormwood to such men to have to admit that they are not entirely personally responsible for a success. Ideal partners should forget *meum* and *tuum* and should learn to take common pride in the results of each other's work. They should, in a word, have the "team spirit" and not a narrow personal outlook. They should also reflect that a few years after their death their names will, in all probability, be forgotten in connection with their work and should also remember that in most cases the greatest misfortune that can happen to any man is to see work he has done frequently! He is certain in such cases to realise its defects and to overlook its good points and it is only in moments of hopefulness, when we see golden visions of what we intend to do, that we catch the elusive outlines of a perfect design.

Architect's Claim for Fees.

In the King's Bench Division on Wednesday Mr. Justice Rowlatt heard an action brought by Mr. William George Ingram, architect, of Verulam Buildings, London, W.C., against Mr. Frederick Willers, of Cavendish Drive, Leytonstone, in which the plaintiff sought to recover £1,158 17s. for work done and services rendered as architect and surveyor to and for the defendant in connection with the development of the Glebe Estate at Hendon.

Mr. Holman Gregory, K.C., and Mr. T. Mathew appeared for the plaintiff. Defendant was represented by Mr. A. Neilson, K.C., and Mr. M. Barnett.

Mr. Gregory said the allegation made by the defendant was that all the plaintiff had done for him was worthless. Early in 1922 the defendant was minded to buy a piece of land of about 4½ acres at Hendon for development, and in March, 1922, he entered into a contract to buy for £800 an acre. He then went to the plaintiff and asked him whether he could undertake the development for him and, if he did, whether he could find someone who would finance him. Plaintiff said he thought he could, and took the defendant to Messrs. Bruce Millar & Co., solicitors. Eventually a deposit and everything else was paid and the money was found by this firm of solicitors. Then Mr. Ingram was instructed to act as architect and surveyor. He was required to submit a plan to Messrs. Bruce Millar and also prepared a block plan of the estate for submission to the local authority. He was seeing the defendant day by day, and was instructed to prepare the plans for some shops on the front of the estate with tenements over them, which would sell for about £3,500 each. He prepared plans of seven to begin with and agreed to do the work for 100 guineas a shop and flat. The plans were ready to submit to the local authority when the defendant said he thought they would sell better if an extra storey were added. He, however, desired the plans made to be sent to the local authority so that he would have an alternative scheme, and the plans were accordingly submitted to and passed by the local authority on June 7, 1922. Plaintiff also sent in alternative plans for four of the seven and these were passed upon July 25. About that time plaintiff arranged with the defendant that he should send in plans for the other three shops, and he also worked out plans for another seven shops. In August, 1922, plaintiff was surprised to receive a letter from the defendant saying he thought the best was not being made of the site by the plans submitted and that there had been serious delay. He had therefore, he said, called in another architect, whose plans he proposed to use. At that time, said Counsel, it appeared the defendant had gone elsewhere to be financed. Mr. Ingram replied saying that the lay-out had been arranged between them together and denying that there had been any delay on his part in preparing the plans. Later he sent in his bill. Defendant replied that Mr. Ingram's plans were useless and were never accepted and that he had failed to arrange the necessary finance. Plaintiff charged the full prices for the work, but he had since been advised that as the whole of the work had not been done he ought in some cases to charge two-thirds, and the total sued for was now £1,158 17s.

Mr. Ingram, the plaintiff, gave evidence in support of Counsel's statement.

Cross-examined by Mr. Neilson, he denied having told Mr. Willers at the outset that he need not worry about the charges or that he would not overcharge him. Nothing was said about charges. In the middle of July it was arranged that witness should have 100 guineas per shop. It was not true that Messrs. Bruce Millar had never found a shilling for the finance of the scheme. Witness carried out a chain survey and he did not think his charge of 31 guineas was excessive. The land was sloping all ways.

Counsel: I put it that all the levels shown on your plan are wrong ?—They are not.

They are so wrong that it was impossible for any builder to work from them ?—I say they are perfectly right.

Did you take them yourself ?—No; but I have confidence in my assistants. My plans are perfectly correct.

Then if I pointed out various discrepancies it would make no difference at all ?—No difference at all.

How many shops do you say you were instructed by Mr. Willers to deal with ?—Fifteen.

Witness agreed that his original bill to Mr. Willers was over £1,800 and that he had been advised to reduce it.

Mr. Neilson: Do you know that for the preparation of all the plans for 12 of these shops £500 is what another firm of architects consider is a reasonable fee ?—If they like to work under Scale fees, that is no reason why I should.

Mr. Bruce Millar, solicitor, said he saw Mr. Willers on the plaintiff's introduction, and entered into an agreement with him on May 13 by which witness's firm should find the money required. Later the matter was taken out of his hands. He lent to Mr. Willers £1,000, which was repaid, and Mr. Willers did not ask him for any more.

Mr. Frank Evans, Lic.R.I.B.A., assistant to the plaintiff, said he made the chain survey and took the levels, all of which occupied a day. The levels were correct at the time, but later the Council altered the levels of the road.

Mr. George Percy Pratt, J.P., A.R.I.B.A., said the plaintiff's plans were effective working plans, and his charges with the alterations made were fair and reasonable. The alteration of the levels would not necessitate making new plans.

That concluded the plaintiff s case.

Mr. Fredk. Cox, manager to Messrs. J. Lang & Sons, Ltd., builders, of London and Carlisle, giving evidence for the defence, said his firm were engaged by Mr. Willers in connection with the erection of the shops. Owing to the fact that witness was informed that the Council were about to alter the levels of the road, it was impossible to work to the plans supplied by Mr. Ingram.

Adjourned.

Hearing continued on Thursday.

Mr. Willers, the defendant, giving evidence, said he promised to engage Mr. Ingram to do the plans if he (plaintiff) could provide someone who would finance him. At the beginning of April, 1922, withness made a contract with the builders to erect the shops, but he did not get the plans from plaintiff until July 5. It was never agreed that Mr. Ingram should charge 100 guineas per shop, nor was any figure mentioned. He thought Mr. Ingram's charges were much too high.

Mr. Frederick W. C. Barker, Member of the Society of Architects, said he acted with Messrs. Culpin and Bowers, architects, over these shops. Witness took the levels and prepared the plans from which the shops were ultimately built. Witness charged £500 for the preparation of the working drawings for twenty shops, and that fee was paid. He considered that was quite a satisfactory fee.

Mr. Charles Edward Hutchinson, Associate R.I.B.A., said he had considered the plaintiff's account, and examined the plans he had prepared, and there was a considerable amount of repetition work about them. He thought in considering what was a reasonable fee repetition work would be taken into account in this class of commercial speculative work. When they got repeat after repeat it was the custom in the profession to recognise it, and it was hardly fair to apply the scale. He thought 500 guineas would be a very fair and reasonable charge to make for these plans.

Mr. Douglas Scott, Associate R.I.B.A., hon. secretary of the Practice Standing Committee of the Institute, said he agreed with what the previous witness had said as to repetition work. From the evidence he had heard he thought 500 guineas would be a reasonable fee in this case owing to the amount of work which was duplicated.

Mr. Holman Gregory (cross-examining): Is the scale fixed by the Institute reasonable and fair ?—Yes.

You have seen the plans for the four shops. What is there in them that you say is repetition ?—The plans of the four are exactly alike.

Are you saying that if an architect is asked to do plans for four houses such as these he would say to his employer, " These are repetition plans, and I should not charge the ordinary scale " ? —No.

If you go to a good class architect to-day would he not expect payment on the scale for these plans ?—Yes.

You would, would you not ?—Yes.

Mr. Justice Rowlatt, in giving judgment, said that on the question of delay he did not think there was in fact any delay which would entitle Mr. Willers to say he would not go on with the plaintiff. It was said there was justification for cancelling on the ground that the plaintiff's plans did not conform with the new levels of the road, but that was a matter of adjustment, and his Lordship thought it was quite impossible to treat that as a serious matter. Mr. Willers apparently changed his mind and wanted to be free to go elsewhere. He was wrong in terminating the plaintiff's employment, but right in saying he would pay for work that had been done.

What troubled his Lordship was the amount which the defendant should pay. One architect might say he would do the whole thing for 500 guineas, but his Lordship did not think it was fair to say that therefore the plaintiff must do it for that. At the same time the plaintiff would have had to adjust the plans to the new roadway, and his Lordship considered there was a good deal of repetition in the plans of the shops and flats. Perhaps the plaintiff ought to be allowed something for getting finance, although he (the Judge) did not know that that was architect's work. He found great difficulty, but he had come to the conclusion that he ought to award the plaintiff £850.

Judgment was accordingly entered for the plaintiff for £850, with costs.

Correspondence

[*The Editor will not be responsible for the opinions expressed by Correspondents.*]

Centenary of University College, London.

To the Editor of THE ARCHITECT.

SIR,—The hundredth anniversary of the foundation of University College, London, will be celebrated in 1926.

Materials (records, reminiscences, pictures, photographs, etc.) are being collected with a view to the production of a History of the College as a part of the Centenary Celebrations. The volume will include a chapter on the School of Architecture.

Members and friends of the College are invited to send such materials as they can contribute, to my care, for the use of the historian, who will shortly be appointed.

All documents will be carefully marked with the owners' names, and will, in due course, be returned unless the owners desire to present them for the College archives.

Communications and parcels (marked "Centenary") should be sent to me at the College.

I shall be obliged if you will publish this letter in your columns.—Yours, etc.,

GREGORY FOSTER,
Fellow and Provost.

The Society of Architects.

The following notice has been sent out to members of the Society of Architects:—

"Notice is hereby given that an extraordinary general meeting of the Society of Architects will be held at King George's Hall, Caroline Street, Tottenham Court Road, W.C.1, on Thursday, the 24th day of July, 1924, at three o'clock in the afternoon, for the puprose of considering, and, if thought fit, passing the subjoined resolution, viz:—

"That this meeting hereby approves, ratifies, and confirms the Provisional Agreement for Amalgamation dated the 29th day of May, 1924, and made between the Royal Institute of British Architects of the one part, and the Society of the other part, and hereby directs the Council of the Society to carry such Agreement into effect either with or without modification.

"Should the above resolution be passed by the requisite majority, it will be submitted for confirmation as a Special Resolution to a second extraordinary general meeting, and such meeting will be held on Friday, the 8th day of August, 1924, at the registered office of the Society, 28 Bedford Square, London, W.C.1, at three o'clock in the afternoon for the purpose of considering and, if thought fit, confirming such resolution as a Special Resolution accordingly."

In the accompanying letter the President points out that the new class of Licentiates, which will include the majority of members of the Society, must not be confused with the present class, since they will be full corporate members possessing the franchise. It is interesting to note that the President states that the *sole* reason for the amalgamation is for the purpose of obtaining Registration and nothing is said which would suggest that union is desirable *per se*.

"The Architect" Fifty Years Ago.

JULY 18, 1874.

THE INNER CIRCLE RAILWAY SCHEME.

By means of the proposed line from the Metropolitan Railway north of Aldgate to the Metropolitan District Railway in Cannon Street (just sanctioned by the Lords) the Inner Circle Railway will be completed; the trains of the Metropolitan and District Companies will run all round the circle, thereby effecting a great economy in the working of both systems, facilitating an increase in the number of trains, and ensuring greater punctuality. At the same time the Great Western, the Midland, and Great Northern Companies will obtain access, *via* Moorgate Street, to the Mansion House Station of the District Company.

SWANSEA.—Plans passed by Town Council: Six houses, St. Peter's Road, for Mr. Edwin Davies; mission hall and workshop, Prince of Wales Road, for Mr. Gustavus; four houses, Tycoch Estate, for Mr. A. Lodge; three bungalows, Tycoch Estate, for Mr. E. Tucker.—Consideration is being given to a proposal for the erection of municipal workhouses.—The Corporation propose the erection of 50 more houses on the Townhill housing estate.

WEST MIDDLESEX.—The West Middlesex Joint Town Planning Committee have decided that each local authority within the region be invited to proceed with their respective schemes, and adopt the proposals contained in the regional plan.

The British Archæological Association Congress.

The British Archæological Association, which held its 81st Annual Congress in the delightful neighbourhood of Hastings, making this historic town its headquarters, broke up after visiting Echingham Church and Bayham Abbey. At Hastings, where the Congress assembled on Monday, between 50 and 60 members devoted their attention to the Castle and the ancient churches. The identity of the present Castle Mount with that shown in the Bayeux Tapestry was discussed, and the ruins of the Collegiate Church founded soon after the Conquest were distinguished from the later curtain walls of the military castle which probably replaced a timber stockade. The subterranean passages were also visited. At the ancient church of St. Clement the party was met by the Rector. It is known that the site of the present church was given in 1286 to replace an earlier church destroyed by the sea. All Saints Church was likewise rebuilt about 1430, and here a remarkable wall painting of the Doom over the chancel arch was examined. The early earthwork on the East Hill, which was considered to be of the Molithic Age, and the extensive caves in the sandstone also claimed attention.

At a reception by the Mayor (Councillor A. Blackman, J.P.) the Corporation regalia included a pair of fine maces, the gift of Lord Ashburnham in 1710, and a punch bowl and ladle made from the silver staves which supported the canopy carried over George II. and his Queen Caroline at their Coronation.

At Battle Abbey, on Tuesday, the Great Gateway, erected soon after 1330, was carefully studied under the guidance of Mr. P. M. Johnston, F.S.A., who drew attention to the Kentish tracery. The fine thirteenth-century dormitory with the range of vaulted apartments below, the cloisters and the triapsidal termination of the Abbey Church also received attention.

The places afterwards visited included the scanty remains of Robertsbridge and Bodiam Castle, where, in the absence of Lord Curzon of Kedleston, Mr. Harold Dands read an interesting paper on the architecture of this complete example of a moated fourteenth-century fortress, particularly mentioning the recent discoveries of the well and the bridges over the moat.

At Winchelsea Lady Ritchie, in the absence of Lord Ritchie of Dundee (who is Mayor of this ancient town), and Mr. Campion, one of the Jurats, received the party and the ancient Court Hall and the church were visited. At Rye the Land Gate, Town Hall, Church, Ypres Tower and other places of archæological interest with which this ancient town abounds were visited. The French influence in the architecture was remarked, the whole of this district having anciently been under the lordship of the Abbey of Fécamp, in Normandy.

At Bexhill, on Thursday, the history of this modern watering place was carried back to the eighth century by the remarkable Hiberno-Saxon grave slabs found in the church, which is the only monument of this kind found in the south-east of England.

The history of Pevensey Castle was ably dealt with by Mr. Harold Sands, F.S.A., who has excavated the Norman keep, which proved to be a rectangular structure and not a mound, as had previously been supposed. At Westham, Mr. P. M. Johnston illustrated the development of the plan of the church from that of a Norman cruciform church with apsidal termination to a perpendicular church with a western tower.

Eastbourne was claimed by the Rev. A. Budgen, who has made a study of its history, to be even more historical than Hastings, and the many interesting features of the church were pointed out, the twelfth-century masons' work being practically identical to that to be found in other churches in the district.

Hurstmonceux Castle and church were also visited.

A very interesting day was spent on Friday amongst the Romney Marsh churches, which were visited under the guidance of Mr. Ellerston Erwood. At Brookland the remarkable leaden font was described by Mr. Druce, who explained the emblems of the months of the year which it illustrates.

Lydd Church, the longest in Kent, exhibits the remains of a Saxon basilica, and New Romney Church, with its fine western tower and many details of interest, also claimed attention.

A series of evening lectures included a paper on the history of Battle Abbey, by Miss Rose Graham, F.S.A., which dealt with the records available for the students of its architecture and monastic life: a lecture by Mr. J. E. Ray, F.R.Hist.S., on the vicissitudes of Old Hastings as a fishing town, while Mr. P. M. Johnston, F.S.A., dealt with Sussex Churches and their Architecture, and Mr. Taylor told the story of the Cinque Ports.

Boyle's latest patent "Air-Pump" Ventilators have been applied to Barlinnie Prison, Glasgow, to the order of the Prison Commissioners for Scotland. Supplied by Messrs. Robert Boyle & Son, ventilating engineers, Holborn Viaduct, London.

General News.

ARMTHORPE.—A school for 1,000 is proposed by the West Riding Education Committee at a cost of £23,000.

BARNES.—The Urban District Council are endeavouring to purchase a small open space between East Sheen Avenue and Polewell Park. An amended lay-out of the town plans of the Percy Lodge Estate is proposed to enable Mr. R. Atkinson, the architect, to save a large number of beautiful trees.—Plans passed: 21 houses, Percy Lodge Estate, for Mr. R. Atkinson; public hall, Gordon Avenue, for Mr. F. J. Wren; five houses, Sholstone Road, for Mr. R. B. Powell.—The London County Council now propose to carry out a scheme for the purchase of 50 acres at Castlenau for developing a new housing estate and a capital estimate of £50,000 is recommended in respect of acquisition and partial development of site.

BATLEY.—The Governors of the Batley Girls' Grammar School are to carry out extensions at a cost of £2,915.

BEDFORD.—The Town Council propose renting part of Newnham House and converting it, at a cost of £450, into office accommodation for the Borough Engineer's department.—Mr. E. H. C. Inskip has lodged plans for the conversion of houses in Viewbollor Road into flats and for a pavilion in Millar Road for the Meltis Sports Club.—Subsidy houses are to be erected by Mr. R. Jeakings (four) in Cutliffe Grove, and Mr. F. Dickens (four) in Goldington Road.

BRISTOL.—The City Council have prepared plans for a new swing bridge over Direction Lock, estimated to cost £20,132.

CAMBERWELL.—The Borough Council are recommended to accept the tender of Messrs. W. Palmer & Sons to paint 386 houses at £2 12s. 6d. per house.

CATFORD.—A vote of £900,000 is proposed by the L.C.C. to further develop the Downham Estate. In February the Council decided to enter into a contract with Holland & Hannen & Cubitts Ltd., on a cost price basis for the development of the Bromley Road (No. 1) section of Downham. The contract provides for the erection of 2,000 houses and an estimate of £300,000 has been approved in respect of the first instalment of 500 houses, for which an order has been placed. The contractors have restricted their active operations to the construction of these houses with the necessary roads and sewers, but they have provided a lay-out and plant for the 2,000 houses and for the necessary roads and sewers therefor. It is now desirable that further sections should be proceeded with.

CHESTERFIELD.—The Town Council has asked the Borough Engineer to prepare a plan of the whole of the undeveloped portion of the borough not already included in a town planning scheme.—Plans passed: Extension of Marsden Street church schools and new factory in Sheffield Road for Messrs. Lamp Caps, Ltd.—The tender of Messrs. P. and W. Anderson, Ltd., £6,851, has been accepted for the erection of baths in Storforth Lane.—The Borough Surveyor is to prepare plans for B3 type houses on sites on the Boythorpe Estate, and the Town Clerk is to inquire as to housing sites in the Hasland district.—The tender of Mr. F. V. Pashley, £417 10s., has been accepted for decorating the public rooms at the Market Hall.

DEWSBURY.—The Education Committee propose a new school at Myrtle Road, Ravensthorpe, for 600 children, and additional accommodation for 250 children at Thornhill Walker Council School.

DORCHESTER.—The Town Council propose an exit from the Market in Weymouth Avenue to alleviate congestion elsewhere.—The Dorchester Building Guild have arranged to erect 24 houses for the Council at £557 each.—The Housing Committee are to consider the provision of non-parlour houses. Plans have been passed for improvements at the King's Arms Hotel.

DOUGLAS (I.O.M.).—The Town Council are to obtain legal advice as to the present powers of the Council with respect to the enforcement of the condition of the deed of sale as to uniform colouring of houses on the Loch Promenade.—The Council are to prepare schemes of widening the Loch Promenade at the base of Victoria Pier and completing water main renewals.—Tree planting at the watersheds is proposed.—The tender of Messrs. Cowell & Corkill is recommended for the building of 10 parlour houses on the Hills Estate at £675 each and 10 non-parlour houses at £605 each.—Plans passed: private patients' wards and maternity wings at Noble's Hospital; house, Peel Road, for Mr. S. K. Cowell.

EAST HAM.—Revised plans have been prepared by the Borough Engineer for the provision of vapour baths at a cost of £3,000.—Plans passed: 129 houses, Caledon Road, for Mr. H. Evan Jones; 106 houses, Eustace and Haldane Roads, for Leyton Building Co.; 14 houses in Caulfield Road, for Mr. T. B. Goodwin, and five houses, St. Stephen's Road, for Messrs. Harapath Bros.

GLASGOW.—A new tramway siding is to be constructed in Dukes Road, Burnside.—A hall is to be erected by the Highlanders' Institute in Elmbank Street.—A pavilion with 24 beds is to be erected at the Bellefield sanatorium.—Additional accommodation is to be provided at Mount Blow Home at a cost of £29,500.—A child welfare centre is to be erected in the Springburn area.—Sewage schemes at a cost of £17,000 are proposed.—The Housing Committee have had plans before them of two-storey flatted timber houses in connection with a suggestion that such places could be erected without delay to meet the overcrowding evil and the Director of Housing has been asked to submit further information.—It is proposed to purchase Higginbothams Mill as a housing site for £10,000.—For the housing scheme at West Craighton the Committee recommends the following tenders:—Excavator, brick, and mason work, William Taylor & Son (Glasgow), Ltd., £16,566 4s. 5d.; carpenter, joiner, etc., work, W. Vernal, £14,254 10s. 9d.; lath work, Arthur Finlayson, £883 4s. 7d.; glazier work, George G. Kirkland, £551; slater and roughcast work, Robert A. Sanderson, £3,694 19s. 7d.; plumber work, Andrew Gilmour, £6,949 13s. 4d.; plaster work, Archibald M'Kellar, £2,880 16s. 1d.; iron railings and gates, P. & R. Fleming & Co., £482 18s. 1d.; painter work, M'Kenzie & M'Arthur, £1,045 10s. 4d.

GLASSHOUGHTON.—At a cost of £13,000 the Glasshoughton Airedale School is to be enlarged by the provision of 550 places.

GOOLE.—The Secondary School Governors have prepared a scheme of extensions to cost £10,935.

GRAVESEND.—Mr. H. A. Brown, B.A., town clerk, reports that the Minister of Transport has expressed the view that a lower Thames tunnel between Kent and Essex is a necessity, but that they are not yet satisfied as to the most suitable place for its construction, but something definite can be expected before Christmas.—The Sanatorium, where oil lamps are still in use, is to be lighted by electricity.—The Corporation are seeking sanction to a subsidy scheme for a second hundred houses.—The Architect and Borough Engineer are to arrange for the lay-out of Kings Farm Estate.—The tender of Messrs. Mears Bros., £498, for the construction of a paddling pool is recommended.—Plans have been passed for branch premises in Echo Square for the Gravesend Co-operative Society.—The town clerk is to report on the practicability of the Corporation purchasing land to lay out for sports.

HACKNEY.—The Ministry of Health has sanctioned a Borough Council scheme for the erection of maisonettes, and tenders are to be forthwith invited.

HANWELL.—Mr. Percy Scott, clerk to the Urban District Council, has been asked to submit a draft town planning scheme for the detached area or district.—The Council proposes to pass plans for the rebuilding of the Red Lion public house, subject to the surrender of land to effect a road widening.—The Council is considering an additional housing scheme.

HARWICH.—It has long been felt that the present municipal accommodation is inadequate and the Town Council have considered various schemes for new headquarters. It is now, however, felt that the existing Guildhall should be altered and enlarged and a committee have been formed to prepare recommendations in this connection.—Oakley Road is to be widened at a cost of £5,360. Plans have been passed for extensions to the Cottage Hospital.

LEEDS.—A new school for 1,000 children is to be erected at Crossgates.

LEWISHAM.—Messrs. Smith, Oakley and Garrard have lodged plans for new streets between Burnt Ash Hill and Baring Road, Lee.—Houses are to be erected by Mr. P. B. Dannant at Loxton Road and Cranston Road, Forest Hill.—Plans passed: Nine houses, Ravensbourne Park Crescent, for Mr. G. Watt; eight houses, Baring Road, for Mr. R. J. Bellingham.

LONDON.—The L.C.C. Education Committee have prepared a building programme covering a period of three years and involving an expenditure this year of £726,400; next year £920,700 and the following year £705,500. The scheme includes 12 central schools, and 12 secondary schools. The programme will involve a considerable amount of building work, and the Committee are of opinion that H.M. Government should be informed, and should be urged to ensure that adequate provision of labour and materials is made.

NEW MALDEN.—24 houses, Albert Road, for S. E. Parkes; 8 houses, Blakes Lane, for R. Lewis.

NORTHFLEET.—Mr. Geoffrey Hatten, clerk to the Urban District Council, reports that it is likely that the neighbourhood of Northfleet and Tilbury will be chosen for the position of the suggested lower Thames tunnel.—It is proposed that the present occupiers of the old Council offices be given an opportunity of bidding for the freehold or premises.—The Surveyor has prepared

plans for a public landing stage, but it is considered that the cost of purchasing the property will be too expensive for a public landing stage only, and the Council are to review the situation before deciding what shall be done.

NORTHAMPTON—The Housing Committee has allocated contracts for 44 houses on the Far Cotton site as under: Mr. Thomas Wilson, 6 B.3, at £2,715, and 4 B.3, at £1,830; Mr. C. R. King, 2 A.3, at £800, 2 A.3 and 2 B.3, at £1,710, 2 A.3 and 2 B.3, at £1,710; and Messrs. Walker & Perrett, 6 A.3, at £2,349, 4 A.3, at £1,580, 4 A.3, at £1,574, 4 A.3 at £1,580 and 6 A.3 at £3,368. The Abingdon site is to be dealt with and tenders for 66 houses are to be invited.—Plans passed: warehouse, 35, Sheep Street, A. R. Cleaver; sub station, Bruce Street, Northampton Electric Light and Power Co., Ltd.; extension to factory, Kingsthorpe Road, Barratt & Co., Ltd.

OSSETT.—The Educational Committee have considered sketch plans of the suggested permanent extensions to the school, taking into account the school's immediate requirements as shown by the Headmaster, and decided to recommend the County Council to proceed at once with the scheme, suggesting, however, that the southerly and westerly fronts should be of stone.—The Croft House Estate is to be purchased for £3,000 for the purpose of a welfare centre, school clinic and a school.—The Borough Surveyor is to get tenders for painting the town hall and clock-tower.—Mr. T. W. Wilson, the town clerk, has been authorised to offer £1,280 for property required for playing fields by the Grammar School.—Plans passed: warehouse, Wakefield Road, for Mr. J. H. Nettleton; house, Wakefield Road, for Mr. W. Slater.

OTLEY.—The Urban District Council are to erect 24 houses at a cost of £10,860 on the Newall Carr Road Estate.—Plans passed for printing works, Station Road, for Mr. Charles Walker, and works near Bondgate for Kopec, Ltd.

PENZANCE.—Mr. T. H. Cornish, town clerk, has been asked to prepare a comprehensive report with regard to the preparation of a town planning scheme.—Plans have been prepared for improved accommodation at the cattle market.—The Quay Committee has come to the conclusion that it is not opportune at the moment to proceed with the scheme for additional accommodation at the docks.

PONTEFRACT.—The Education Committee has decided to provide accommodation for 100 children at the Love Lane Council School.

PRESTWICH.—The Urban District Council have approved the lay-out submitted by Messrs. S. & S. K. Sambrook, for the Woodhill Estate, and passed plans for 24 houses in Lincoln Drive for Mr. J. Buckley; six in Woodlands Crescent for Messrs. W. A. Knowles & Warhite; and eight in York Avenue for Mr. G. F. Darbyshire.

ROTHERHAM.—The Corporation are to spend £185 to repair 10 houses on the Gortdene Estate owing to rot in the floors.—The Corporation propose to carry out next winter the scheme for the reconstruction and widening of Jail Bridge and the erection of the river wall, including the acquisition of the properties scheduled to the Rotherham Corporation Bill now before Parliament, the estimated cost of carrying out this improvement being approximately £50,000.—A new road is to be constructed by Mr. W. H. Treherne in the Broom Valley for estate development.—Plans passed for four bungalows in Cattenham Road for Mr. T. Cartwright.

SALFORD.—The Corporation propose an expenditure of £1,800 at the markets in order to improve the accommodation.

SEDGLEY.—The Housing Committee of the Urban District Council are to visit Greenway Gardens before coming to a decision in respect of its lay-out.—Plans have been passed for alterations and additions to the administrative buildings at the Baggeridge Colliery. Alterations and extensions are to be carried out at the gas works at a cost of £2,750.

SELBY.—The Urban District Council has decided to press forward a scheme for the construction of a new bridge across the canal.—The Health Ministry has sanctioned the erection of 20 houses at a cost of £9,220.—The Transport Ministry has approved a scheme for a road from Flaxley Road to Wistow Road.—Canon Solloway is applying for a piece of land for a proposed extension of the National Schools.

SHEFFIELD.—The London and North Eastern Railway bridge in Retford Road is to be reconstructed at a cost of £23,000.

SHOREDITCH.—The Borough Council are to prepare plans for structural alterations to improve the accommodation in the Town Clerk's department.—A factory is to be erected at the rear of 2 and 4 Queen's Road.

SMETHWICK.—Alteration of Tramway Parcels Express Depot into stores for the Birmingham and Midland Motor Omnibus Co., Ltd., in Bearwood Road.

SOUTHGATE.—An assembly hall is to be erected at the Minchenden secondary school at a cost of £1,830, and the Middlesex Education Committee recommends acceptance at this amount of the tender of Messrs. G. Godson & Sons. Ltd., of Kilburn Lane.

STALYBRIDGE.—The Town Council have agreed to the demolition of cottages and alterations and improvements to the Old Fleece Hotel belonging to John Smith's Tadcaster Brewery Co., Ltd.

STOKE NEWINGTON.—The Borough Council offer no objection to plans for seven houses in Woodberry Road, for Mr. H. J. White. —The Council have invited tenders for the extension of the public library.—It is being urged that a swimming bath should be erected.

SWINTON AND PENDLEBURY.—The Urban Council have passed plans: Parsonage in Moorside Road, Swinton, for the Ecclesiastical Commissioners; "lay-out" on Clovelly Estate, Swinton, for Mr. T. H. Eggengton.—A bowling green is to be provided in Victoria Park.—A loan of £4,250 has been sanctioned for electricity extensions.—The Potters Square unhealthy area is to be cleared, and the Council are inquiring for rehousing sites.—The open-air school is to be altered and improved.

TAVISTOCK.—Plans for an additional classroom at the Gulworthy Council school are to be prepared by the County Architect.

THORNE.—An estimate of £25,000 is put forward by the West Riding County Council for the erection of a secondary school.

THURCROFT.—A school for 500 is to be built at a cost of £11,000.

TRURO.—The City Council are to erect eight more houses on the Newham site and the tender of Mr. Williams, who is erecting 18 houses for the Council on the site, is recommended at £450 8s. 6d. per house.—The Council still await a reply from the G.W.R. Public Utility Secretary as to the erection of houses for railwaymen.—Plans for the bridging over of the river between Lemon Bridge and Tabernacle Street have been submitted to the Board of Trade for approval. The cost of the scheme is estimated at £4,250.—The Health Minister has asked the Council to await the public inquiry into the loan application of £6,000 for the public hall scheme before inviting tenders.

WATFORD.—Having regard to the important developments in connection with the various housing schemes, the Town Council have asked a committee to consider the preparation of a comprehensive town planning scheme.—In view of the continual growth of the town the railway company are to be pressed to provide a new entrance to the railway station.—The Borough Surveyor has been asked to prepare plans for the reconstruction of Wiggenhall bridge.—The National Omnibus Co., are erecting a large garage on the Dalton House Estate.—Plans approved: eight houses, King George's Avenue, for Messrs. Kempster & Williams, three houses, St. John's Road, for Mrs. Allen.—The Council has decided not to entertain an offer of Upton House by Mr. H. Leonard, who would run it as a residential hotel.

WEST RIDING.—The County Council have prepared a scheme for providing new office accommodation to Wakefield store and garage at a cost of £88,774.—The County Council accepted the tender of Sir William Arrol & Co., Ltd., £34,337, for the construction of a bridge at Carlton, and it is now proposed that the firm shall construct the ferro-concrete viaducts and eastern embankments at a cost of £34,337.

WOKING.—The Urban Council are proceeding with the numbering of houses. The riparian owners are to be asked to clear out the River Bourne to obviate complaints as to floods.—A subsidy has been voted to the Duke of Sutherland for three cottages at Blanchards Hill.—Mr. R. Mossop, clerk to the Urban District Council, has communicated with the Minister of Health with regard to the insurance of houses where wireless installations have been placed, and ascertained that the Ministry will not insist on special insurance if the Council gets consent before such apparatus is installed and such installations are carried out without damage and to the satisfaction of the Surveyor.

WOLVERHAMPTON.—The Housing Committee of the Corporation have accepted the tender of Mr. M. A. Boswell of £25,200 for the erection of 56 concrete houses on the Oxley site.—The Educational Committee have withdrawn tenders for alterations and additions to the heating apparatus of three schools, in order that a comprehensive report might be considered upon the heating systems in all the schools.—The Upper Penn Woodfield Avenue school is to be enlarged by 320 places.—A special committee recommend the policy of the Council erecting a public hall on a site in Worth Street, for which purpose the sites of the Telephone Building and Jessop's Hotel will be required.

WOOLWICH.—The Borough Council asked the L.C.C. to reconsider its decision of a year ago not to undertake the construction of a tunnel to replace the Woolwich Ferry, but the County Council state that they are still of opinion that the advantages of the scheme are not commensurate with the huge cost that would be involved.

VOL. CXII.—2901. THE ARCHITECT JULY 25, 1924.

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BRITANNIA PROTECTING THE SMALLER NATIONS. CHARLES L. HARTWELL, R.A.

The Danger of Architectural Education in the Schools.

In an age which prides itself on its devotion to education it seems somewhat contradictory to argue that an educational system has its dangers, but such is undoubtedly the case in architectural schools.

Hundreds of students are passing through the architectural schools, while a mere fraction of their number can ever hope to make a sufficient income. More than this, they are for the most part devoting a large part of their attention to the consideration and design of classes of building few of them are likely to have an opportunity of carrying out.

It might be otherwise were the Dominions of the Empire in process of becoming what the United States is to-day—a land of great cities and almost boundless wealth; but America, judging by its architectural press, is "metropolitan" in character, while our Dominions still remain "provincial."

Great development is taking place, but it will probably take almost another fifty years before Canada and Australia can offer opportunities to the architect such as almost every state in the Union has to offer to its sons.

At present the type of architect who is best fitted for colonial practice is rather the alert, all-round man whose business qualities and enjoyment of adventure are greater factors than his purely professional skill, and in smaller and younger countries the "draught" of bad times is more acutely felt than with us.

It is true that many younger architects have found happy homes and successful careers in the United States, but many again have realised too clearly when on American soil that they are in a foreign country despite the accident of language, and if this is strongly felt America ceases to be a comfortable habitat. "All places that the eye of heaven visits are to a wise man ports and happy havens," but we are not all wise in the sense that we can find comfort even in a self-inflicted banishment. There remains, of course, the career which to the Union of Architects and Surveyors' Assistants seems a reasonable one—that of the permanent assistant to architects in practice—but we doubt whether this will ever be as satisfactory here as it is in America. We believe there can hardly be fifty architects in England who can provide work and adequate salaries to content a really first-class man as a permanence. Salaries of £500 and upwards are not easily paid for long terms of years by even the most prosperous in our ranks, while death and other accidents may leave a good man very unpleasantly stranded, so that in spite of what members of the union say we hold that everyone who becomes an architectural assistant should never look upon it as more than a stepping stone leading to the goal of an independent practice. Where are the great number of those now trained in architectural schools to find a reasonable outlet? We confess to looking on the future with considerable anxiety.

At the same time a large amount of building is always wanted, but the bulk of this will always fall to those who have the courage and foresight to speculate with their own money or with funds entrusted to them in land and building. If the young architect can once get a start of this kind a much smaller amount of work will suffice to keep him going, and he eliminates the difficulties which stand in the way of those who are only the advisers and agents of their clients. The architect in such cases as we are mentioning will build and sell and build and sell again, making his living out of the profit of the transaction and, if he is unwise, losing some of his money.

But we all have to take risks of some kind or other. If we act in a purely professional capacity we have to wait for those willing to employ us and in lean years frequently spend more than we make.

Unless we greatly broaden the scope of our activities, it is difficult to see how we can find room for those who are now training for a most arduous and uncertain calling in a country which for many years may be going through a slump rather than a boom. If we are to find work for all it must clearly be by widening the scope of our efforts rather than attempting to glean what remains after the bulk of the harvest has been secured by others. We think the younger men should make openings for themselves by following the example set by engineers, who may act both in advisory or executive capacities, in neither case losing *kudos* by so doing.

There is no real reason why architectural skill should not be utilized in the design of all buildings, but it never will be so long as all of us act solely in advisory capacities. We are doing only a fraction of the work which we might deal with, while at the same time the architectural schools are increasing their output of educated architectural students.

There is this additional danger about the students' experience in an architectural school as compared with that of the old routine training of pupilage.

As a pupil he often saw the efforts the principal had to make both in order to obtain and retain work. He knew by observation his disappointments or failures, and so was able to form a fairly just idea of the difficulties and pitfalls of the calling.

But if he goes to a school of architecture or university course, this is not so. He studies and designs often without realizing practical difficulties. He may feel satisfaction in his own proficiency, only to find himself suddenly and very disagreeably checked when at a later date he confronts the facts of existence.

We feel doubtful whether we ought to rejoice or to grieve when we hear of the success of an architectural school, for it may mean the increasing number of those who will subsequently be hard put to it to make any reasonable career for themselves, unless, as we have indicated, the younger men take a very much broader view of the situation than they do at present. We must either do this or else check in some effective manner the inrush of men into what is for the time being both a fashionable and precarious calling.

"The Architect" Fifty Years Ago.

JULY 25, 1874.

THE NEW THAMES TUNNEL.

This new scheme provides a road and railway communication from East Greenwich, across the marshes to Blackwall Point, and thence straight across the river to Poplar, thus forming a direct communication from the East India Dock Road on the north side, to the Woolwich and Greenwich road on the south side. It is stated that the land is peculiarly favourable at this point for the tunnel proposed, and that while the proposal includes a public road for vehicles, it might also be made to present other advantages; that is, by making a second tunnel for railway purposes, and so uniting it to the Great Eastern system at this one point, the whole of the five railway companies could be brought across the river and obtain direct access to Greenwich, Woolwich, &c., and so also unite the South-Eastern Railway. Local Boards in the east are very much in favour of the proposed tunnel.

RESIDENCE AT OYSTER BAY, LONG ISLAND.
H. T. LINDEBERG, Architect. *Architectural Record, April*, 1924.

Our Illustrations.

UNION BUILDINGS, PRETORIA.
COURTYARD.
PORTICO ON CENTRAL AXIS.
} HERBERT BAKER, A.R.A., Architect.

Notes and Comments.

Sir Gilbert Scott, R.A.

We congratulate Sir Gilbert Scott on the new honour he has so well deserved. But the fact that he has conceived and carried out the greatest church of modern times will constitute his greatest title to enduring fame. It is interesting to reflect that in the centuries to come when many of the older cathedrals, despite the care taken of them, will be slowly resolved into ruins, Liverpool will be intact and enduring and will serve to remind generations to come of the story of the development of mediæval art of which it is the outcome in this century. Its architect has carefully tended the flame of inspiration which, nearly dead in the earlier part of the nineteenth century, flickered uncertainly through the Gothic revival and at last became a strong and vigorous flame. The revival, both here and in America, as the work of Goodhue shows, has at last resulted in a strong and vigorous growth which, despite the altered conditions of the time, has given us not simulated but real and living architecture. It has also proved that the great traditions of mediæval art, though modified by the elimination of circumstances which led to their inception, are not dependent on them but can be developed and expanded under new conditions to the great advantage of our national architecture.

Waterloo Bridge.

By a curious coincidence we had commented on the criticism of the London County Council's proposals in connection with Waterloo Bridge and, just before going to press, we received a report showing that the County Council had reconsidered its attitude on the question. This news we gave immediately under our note as it shows that we took too favourable a view of the "stability" of the attitude of the L.C.C. in the matter. That the whole question should be treated as a part of a larger problem is natural and proper, but we should have thought the L.C.C. had quite disposed of the question of rebuilding the bridge on an entirely new design, just as we should have thought that they had satisfied themselves that the defective piers could not well be underpinned. As we were wrong in the first conclusion we may be wrong as to the second, and are therefore inclined to lay far more weight on the criticisms which have been made as to the Council's action in this matter.

Cheap Wisdom.

We are not greatly impressed by Sir Leo Chiozza Money's article on "Housing" in "Forward." It is based on the very old plea for building houses with plenty of land round them. In saying that "most of our problems of health and happiness, of unemployment, could be settled if only families were encouraged to live in wider areas in conditions which would bring sunlight to play upon the body, the refreshment of verdure on the mind, and the possession of half, or even a quarter, of an acre upon the family income," Sir Leo is saying what is manifestly absurd. The possession of cheap and abundant land has no bearing on building prices, and it is the cost of building, and not the cost or difficulty of obtaining land, which is keeping matters back. Sir Leo says that land can be obtained in the near vicinity of towns which is cheaper than linoleum, which seems to surprise him, but does not astonish us, as we should never have considered the purchase of an acre of linoleum as a cheap undertaking! Sir Leo thinks that with land most men would be able to produce a large part of the food they required, and so would be able to tide over periods of unemployment, but we would ask whether they would be likely to do so? We doubt whether we should be in our present difficulties if the average man were willing to work hard and efficiently, but we are afraid this is the exception rather than the rule; meanwhile wisdom—of a kind—is apparently very cheap!

Oxford.

Some of our readers may remember the very complete series of the Oxford Colleges which we gave some years ago, one of the illustrations in which series we now give in this issue, as the series might be of interest to those who at the Conference saw Oxford for the first time.

The Philosopher's Stone.

According to reports from Germany the problem which exercised the minds of the old alchemists has been solved, and a baser metal—to wit, mercury—has been transmuted into gold through the agency of an immensely powerful electric discharge. But "gold made in Germany" will not be a commercial proposition, for the process is very costly and the amount of gold produced extremely small. We do not understand that the German chemists were searching for a means to pay their debts to the Allies, but that the discovery was made in the process of experimental work. It is interesting to reflect that the discovery of a method to produce gold cheaply would be an unmixed misfortune, as it would destroy the most staple index of values the world has ever had; but, if later accounts should substantiate the discovery we have as yet seen only very briefly alluded to, an enormously important scientific discovery will have been made, which is likely to prove of great significance and from the basis of which it is more than probable that commercial developments may come about. Both the law of gravitation and the discovery of rays were the outcome of chance, and now it would seem that another scientific fact has been demonstrated through the same agency.

Mr. Brownlow's System.

In our issue of June 27 last, under the heading Notes and Comments, we mentioned a new method of house building which had come to our notice. Since that date we have been in communication with Mr. Brownlow, of Messrs. Slack & Brownlow, who is the inventor of this new way of erecting brick houses, and we have been down to Tonbridge to inspect the actual laying of bricks by unskilled men, as houses are being put up by this firm to demonstrate the new process. When the site has been arranged, uprights of angle iron are fixed on the ground level at the four corners, and upright T-pieces are fixed between these at intervals of 10 feet or less as required. These form the building line of the house. Boards 7 inches deep by 1 inch thick slide in grooves inside these uprights, and form the face against which the bricks are laid. Any unskilled man can then lay the bricks, as the one great difficulty—namely, keeping these perfectly plumb—has been overcome. Three rows of bricks are laid, the joints of each row being crossed, and then either the board is raised by two nails which slip into the mortar, or, during rain, a fresh board may be slipped in, the first one being used to protect the work already done. By this means work can be carried on during bad weather. If the boards are carried right up the building, these should afford considerable protection against frost and snow in the winter and much of the time at present wasted by inclement weather could be saved. Where houses are built with cavity walls, uprights are placed inside the inner wall in exactly the same manner, the outer and inner walls going up at the same time; all internal walls, partitions and

chimneys follow the same method. Windows and doors are built in very easily, as they can be supported from the uprights until the brickwork round them is finished. There seems to be no difficulty in building these houses to any shape or design. The fact that a man can lay somewhere about 3,000 bricks per day, which is about three times as many as used to be laid in the good old times and five or six times as many as are often laid now shows what a tremendous speeding up is possible by using this method, and we should advise all localities where the housing shortage is acute and where unemployment is rife to make use of this new invention.

INVICTIX PAX: BRONZE PANEL FOR THE WIMBLEDON WAR MEMORIAL.

CHARLES L. HARTWELL, R.A.

New Sculptor R.A.

We congratulate Mr. Charles L. Hartwell upon his election to full Academician honours. His work is very well known and has always made a very strong appeal for its sincerity and truth. The great charm of the marble group illustrating "Dawn" on exhibition at the Tate Gallery, purchased by the trustees of the Chantry Bequest is well known to all who have visited the galleries. We illustrate two of Mr. Hartwell's works in this issue, "Britannia Protecting the Smaller Nations," executed in bronze, and "Invictix Pax," a bronze panel forming part of the Wimbledon War Memorial.

Flats at Islington.

Tenders for 102 flats on Tyndale Place Site, Upper Street, N.1, for the Metropolitan Borough of Islington. Mr. E. C. P. Monson, F.R.I.B.A., F.S.I., etc., architect to the Council, Finsbury Pavement House, 120 Moorgate, E.C.2. Prices include for glazed brickwork on staircases. Bollom, Geo., Acton, W.3, £59,721; *Shillitoe, Thos., Islington, N.7, £63,625; Patman & Fotheringham, Ltd., Islington, N.1, £65,526; Bovis, Ltd., Berkeley Square, W., £65,750; Billings, Ltd., Victoria Street, S.W.1, £66,436; Chessums, Ltd., Tottenham, N.15, £66,687; Rice & Son, Stockwell, S.W.9, £67,070. *Accepted.

Correspondence

[*The Editor will not be responsible for the opinions expressed by Correspondents.*]

Liverpool Cathedral.

To the Editor of THE ARCHITECT.

SIR,—All who are interested in architecture, especially in that relating to cathedrals, would be gratified to see the views you have given us in a recent issue of your valued paper of the new Cathedral at Liverpool, so soon to be dedicated to Divine worship, at least that important part of it which is now nearly completed. As one who has had several opportunities of watching the progress of this new and remarkable building, almost from the foundation courses until within a few months ago, I have taken the deepest interest in the work of the talented young architect who has struck out for himself such an original rendering of Gothic work, and has designed a building which promises, when completed, to be among the most striking constructions of this twentieth century. For height and spaciousness, for rich and delicate carving, especially in the reredos, the bishop's throne, and other decorative portions, and notably in the large extent of plain walling, this new building stands alone among cathedral structures. Most heartily, therefore, do I agree with almost all the praise bestowed upon it in your own and other papers, especially as to the effectiveness of the interior of this great Liverpool church.

But it will not, I hope, be considered as captious or cynical if I venture to point out what I think will mar its appearance, as a whole, if the building is completed according to the plans and perspective views which have been published. My remarks here apply especially to its *exterior*. Do we not all feel that, unless considerably modified from those given by the architect, there is something very unsatisfactory about it? These give no just idea of what will be the real magnitude of the building; and does not this arise from the fewness of its various parts? Three windows only in a nave of 180 feet long (or four, if one includes the transept windows, which are a long way outside the nave)! All this surely hides its otherwise vast dimensions.

Then with regard to the Central Tower. I am much disposed to regret that Mr. Scott abandoned his original design of *two* towers, one at each end of the transept, and did not carry that out, with a noble western tower. Surely the present design is very unsatisfactory, and, I feel convinced, will prove most disappointing if persevered with. I earnestly hope that Mr. Scott will design one on altogether different lines. I am keeping in view, of course, the considerable engineering problems involved in raising a vast tower over a space of about 90 feet square; but if there *is* to be this huge tower, it would certainly be far more satisfactory to carry the square form right up to the summit, and not break it up into an octagon, with that very ugly and unmeaning spike of a roof or spire as a finish. Will anyone maintain that the present design is to be compared for a moment to the noble central steeples of Lincoln or Canterbury? The Liverpool Cathedral tower, as at present designed, would be very much higher than either of those towers, but it will *look* much less; and the whole design of it appears to me to be singularly unworthy of its architect. And then to have only *one* window in a breadth of 90 feet! One would think that *three*, if not more, windows would be required to occupy satisfactorily such an immense walling surface. It is stated that the height of the tower is to be 356 feet; this is, within half a dozen feet, just the height of that noble, stately tower—although unfinished—of Malines Cathedral; but no one will suggest for a moment that Mr. Scott's design can be compared with the grandeur with which the Belgian tower soars aloft into the sky. We all want to see such a tower equalled, if not surpassed, at Liverpool; and why should it not be?

I have not seen the choir of the Cathedral since the temporary western wall was completed, for before that was done there was a superabundance of light; but now that the light comes entirely from the windows, does not the roof-groining appear very dark? It looks so, judging from some of the photographs; and was it, therefore, wise to omit clerestory lighting?

May I add a word as to Mr. Scott's pinnacles? They seem to me singularly ugly. Those small—comparatively speaking—spikes capping the pinnacles on each side of the great eastern window are very unworthy of the rest of the structure; and the rounded tops of those at the transepts are not much more beautiful.

I will only add that I regret that Mr. Scott's original design for the Chapter House was not carried out, an oblong instead of the present octagon one; the circular conical roof of which is singularly ineffective, and the single turret is plain and commonplace. Mr. Scott could surely have given Liverpool an octagon chapter house, even surpassing those of York, or Salisbury, or Westminster.

I wonder whether I am alone in these criticisms. At any rate they are my sincere opinions; and do not lessen my admiration for the genius shown by Mr. Scott in most of his design, as already carried out. May he live to see the whole building completed, especially if he should see fit to modify some of its features in the way I have suggested!

I enclose my card, to show that I have studied and practised some architectural work.—Yours, etc.,

JAMES SIBREE D.D.

SIR,—Will you allow me to add a postscript to my letter to you of yesterday? My criticism with regard to the proposed tower of this Cathedral was based on the perspective views which have been for a long time past given as the adopted design. But since writing as I did, I am delighted to see in another architectural journal, published this week, that Mr. G. G. Scott has already done as I hoped he would do, and has designed a very noble tower, which will give a magnificent completion to the great building he has planned, and which will be a very worthy companion of, if not indeed surpassing, all the stately steeples of our existing Cathedrals.—Yours, etc.,

JAMES SIBREE.

Book Reviews.

"New Rambles in Old London." Second Series. The Homeland Association, Ltd., 37 and 38 Maiden Lane, Covent Garden, W.C.2.

This is the seventh volume of the Homeland Series dealing with Old London, and, like the former volumes, is well arranged and carefully and clearly written. The volume is divided into the following sections: "Along the Bankside," by William Martin, M.A., LL.D., F.S.A., giving an interesting account of the historic section of London between Blackfriars and London Bridge, the river Thames and Southwark Street. Here were situated the Globe and Rose Playhouses, the Bear Garden, the Swan Playhouse, recalling Elizabethan memories. "Along Cheapside" is written by W. G. Morris, and gives, in short compass, the history of the most well known street in Old London. "The Precincts of the Temple" are dealt with by Prescott Row, "Through Old Chelsea" by H. M. Buckingham, while Walter G. Bell, F.S.A., F.R.A.S., writes on the subject he has made especially his own, "In the Track of the Great Fire," and Edward Emmett writes of "Covent Garden." In each section is given a clear street map and several illustrations, the volume being very complete, in spite of its small compass.

"Old Domestic Architecture of Holland." Edited by F. R. Yerbury. London: The Architectural Press, 27-29 Tothill Street, Westminster, S.W.

This volume takes the form of a series of fine photographic views by Mr. Yerbury, who edits it, the views and drawings forming 100 plates, with a short introduction by Dr. I. D. F. Stothouwer, in which he comments on the similarity between Dutch and English architecture of parallel epochs and describes the salient features of Dutch architecture.

Dutch building depends largely for its beauty on the delightful colouring of brickwork, the choice and perfect condition in which all painted work is usually kept, the frequent proximity of water in the form of canals and atmospheric effects due to damp. As in Ireland, so in Holland, colour effects are stronger and more vivid than elsewhere in Northern Europe, and these factors give to its buildings an adventitious importance they would not otherwise possess.

For Dutch building, more than that of any land, resolves itself for the most part into simple treatments of narrow gable ends, pierced with window and door openings which are singularly large as compared with the buildings of which they form the principal features. When we further recognise that Dutch street design shows how harmonious may be the results of a number of individual buildings of like nature and yet distinct and separate design, we have alluded to its chief characteristics. Most of the illustrations are drawn from the dead cities of the Zuider Zee and are situated chiefly in North Holland, the section in which the marked characteristics of Dutch building can best be seen, a land of quiet comfort if it has no longer the importance it possessed three centuries ago.

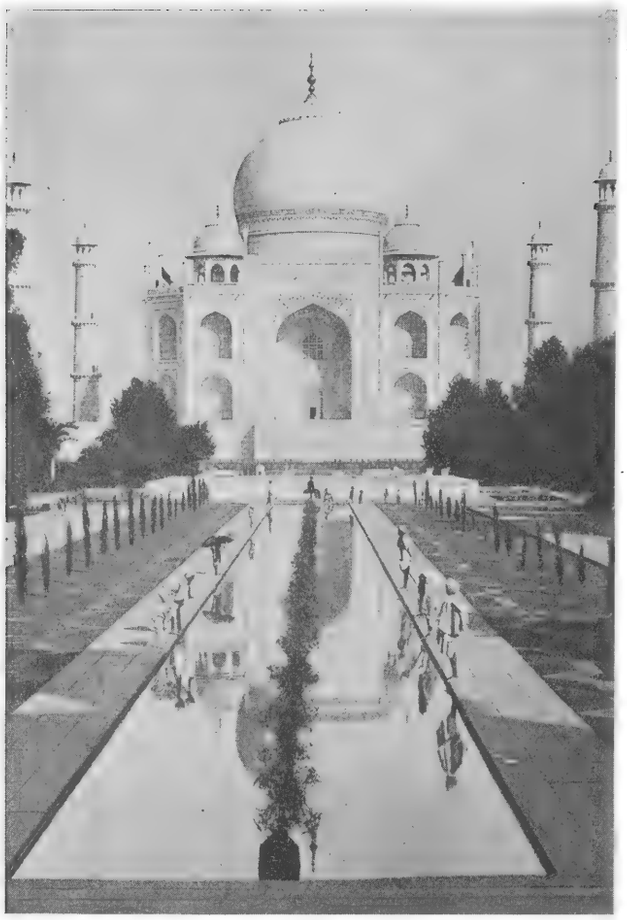
Competition News.

The Establishment Committee of Willesden Urban District Council recommend a site in Dyne Road for the proposed new town hall and suggest that the council should advertise for competitive designs from architects, offering premiums for the best design.

Some Indian Cities.

By V. B. Metta.

Agra.

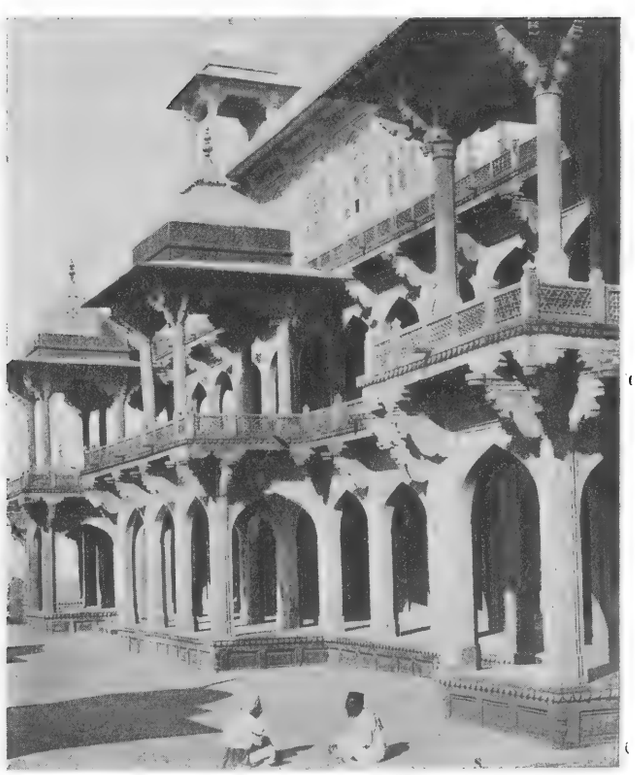


TAJ MAHAL.

The city of Agra was great and prosperous when Rome was not yet founded. You read about it in the "Mahabharata," one of the most ancient of Hindu epics, written about three thousand years ago. Nothing, however, except a few traces of the foundations of that city now remain. Then an Afghan king named Sikander Lodi rebuilt it in A.D. 1505, and made it his capital. Babar, the first of the Moghul emperors of India, enriched it with a number of gardens, baths, tanks, wells and water-courses. But of them nothing except one garden remains. Akbar, the Great Moghul, made it his capital and called it Akbarabad. It became the most delicate and dream-like city in the world when Shah Jehan embellished it with the Taj Mahal and other faery creations of his own. Then the Jats, the Mahrattas and the British either looted it or destroyed some of its buildings. And to-day it claims our attention, not on account of its present importance, but because of its past glory.

Akbar built his red sandstone fort on the ruins of an old fort built by an Afghan king. It is about seventy feet high and a mile and a half in circuit. Its principal entrance is called the "Delhi Gate." You get from this gate to an inner gate called the "Hathi Pole"—that is, the Elephant Gate—by crossing the drawbridge over the moat. It is called by this name because two large stone elephants with riders were once placed outside it. It contains the Naubat Khana (musical gallery) where kettledrums were kept and beaten to announce the arrival or departure of the emperor. It was also used as a guard house—but never as a place where the emperor gave audience to all his subjects, as Finch, the English traveller, who was in India during the reign of Jehangir, thought. The pavilion surmounting the octagonal towers built on either side of the gate is carved with great delicacy and bears traces of painting and enamelled tile work. As you pass through the Elephant Gate the road turns to the left and leads you to the Moti Masjid, the Pearl Mosque, which is built of white marble. The exterior of the mosque is unimpressive and does not prepare you for the beauty that is to be found inside. This beauty is peculiar and unique. It does not depend upon decoration at all—like so many other buildings in the country—but upon the beauty of proportions and building materials, and the harmony of design. The domes of the mosque are bulbous and so light in appearance that you might almost mistake them for bubbles by moonlight. There are four octagonal pavilions at the four corners of the mosque, and kiosques are placed with charming effect over the arches. There are three aisles formed by the massive, monolithic pillars in the interior. On either side of the mosque there is a small chamber with carved windows, for the women of the imperial household to attend the Friday Service without being seen.

The road now turns to the right, and leads you to the Diwani Am—that is, the Hall of Public Audience—where the emperors gave audience to the ambassadors as well as to all their subjects whether high or low, rich or poor. It is a red sandstone building, begun by Shah Jehan and finished by his successor Aurangzebe. It is covered over with fine pearl-coloured stucco in order to protect the stone, and also to give the builders a scope for colouring and decorating the building. The throne was put in an alcove of inlaid marble at the back of the hall. On the two sides of the throne are chambers with perforated



TYPICAL ARCHITECTURE.

marble windows for the imperial ladies. At a little distance from this hall is to be seen Jehangir's *hauz*—that is, bath—which is cut from a single block of marble with steps on the inside as well as outside. Near it is the tomb, quite plain and simple, of Mr. Colvin, a Lieutenant-Governor of the North-West Provinces who died there during the Mutiny of 1857.

The staircase near the throne-room of the Diwani Am leads you to the arcades which surround the Machi Bhvan—

INTERIOR OF A TOMB.

that is, the Fish House. The place is in a very sorry condition now. It was laid out in marble with flower-beds, water-channels, fountains and fish tanks.

The Diwani Khas—that is, the Hall of Private Audience—was built by Shah Jehan. It is very beautiful in design and decoration. Its dados are edged with inlaid work and carved floral types in delicate relief. A doorway at the back of the hall leads you to the Samman Burj—that is, the Jasmine Tower—which surmounts a circular bastion on the river face. It was in this tower that Shah Jehan breathed his last, with his eyes turned towards the Taj Mahal. From this tower you go into another set of apartments known as the Khas Mahal. They are in perfect taste and overlook the river Jumna. There are finely carved niches in the walls of these apartments, where the portraits of the Moghul emperors were put. There is a quadrangle in front of these apartments, which is known as the Anguri Bagh—that is, the Grape Garden. It is surrounded on three sides by arcades, and is laid out like a Moghul garden—that is, with geometrical flower-beds and four terraced walks radiating from a central platform and fountain.

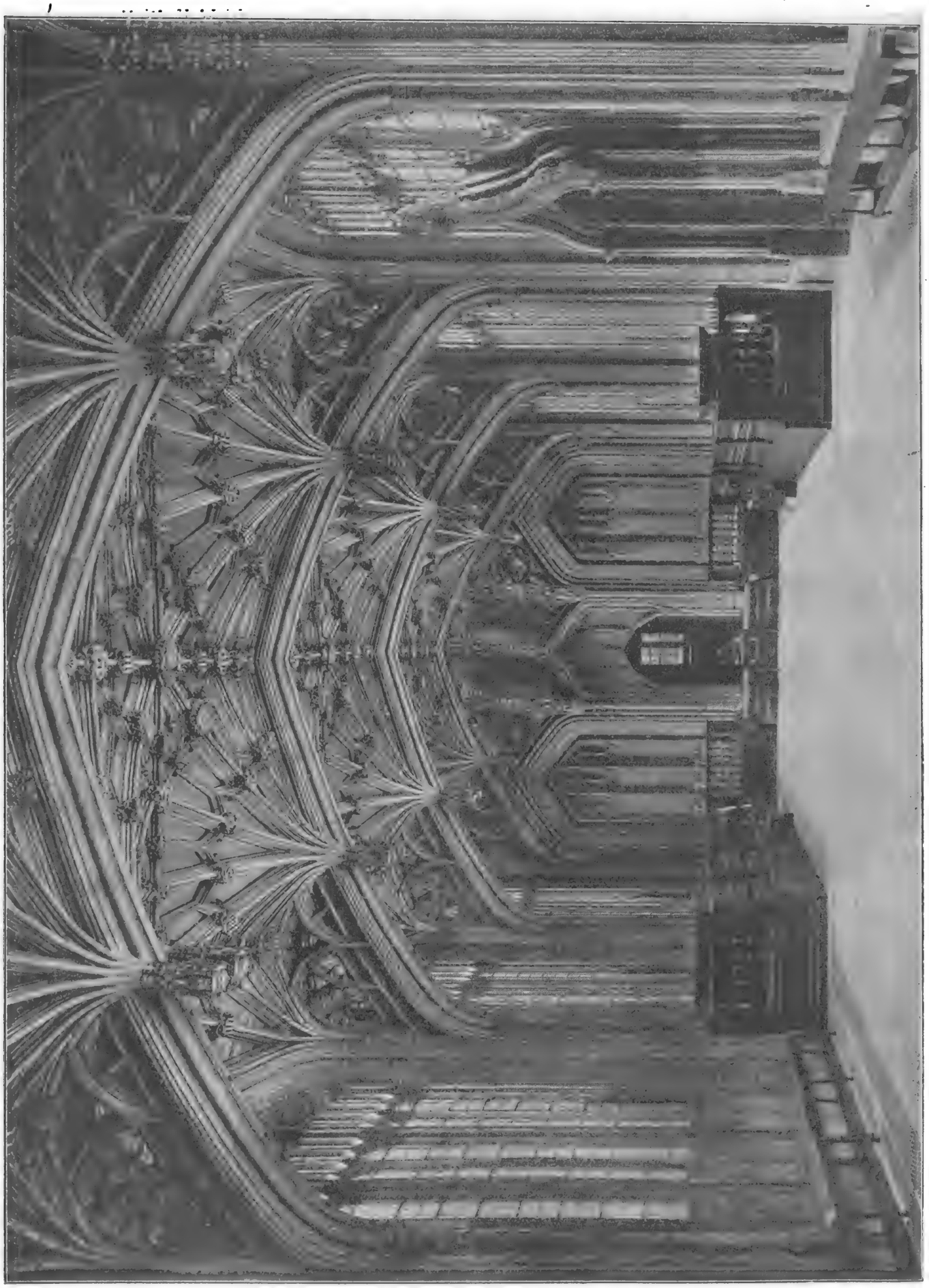
To the north of the Anguri Bagh is the Shish Mahal—that is, the Palace of Glass, so called because it is decorated with a kind of glass mosaic. Here the ladies of the imperial harem used to take their baths. Beyond the Shish Mahal is the Jehangiri Mahal, the Palace of Jehangir, which was built by Akbar for his son Jehangir. It shows how great a difference there was between the temperaments of Akbar and his grandson Shah Jehan. Akbar's work is always bold, virile, and epic, while that of his grandson is always delicate, womanly and lyrical. The dados in some parts of the Jehangiri Mahal are decorated with gesso work on a gold ground. The outer courtyard of this palace is Saracenic, while the inner one is Hindu. The bracket form of construction employed in the inner courtyard produces on the mind of the spectator a sense of mystery and profundity. The Jami Masjid (the cathedral mosque) of Agra, built by Shah Jehan's daughter, is quite inferior to the Jami Masjid of Delhi in design and decoration.

The Taj Mahal, built of white marble, is the mausoleum of Mumtaz Mahal, the favourite wife of Shah Jehan. It was begun in 1632 and finished in 1650. It fully deserves all the praises bestowed upon it by poets and artists, because it is beautiful both from a structural as well as decorative point of view. The garden is a part of the mausoleum, because it is planted in such a way as to enhance the beauty of the lines of the building from different points of view. Its various parts are so well subordinated to each other, that the *tout ensemble* produces a rare sense of harmony in the mind of the spectator. It was most probably designed by Ustad Isa, an architect of Persian origin.* It stands on a platform like the other Moghul tombs. The four minarets at the four angles of the platform are very slender and finely carved. In the interior there is a pierced marble screen surrounding the cenotaphs of the emperor and the empress. There are no rough surfaces and angles to be found anywhere in the building. Everything is soft, womanly and graceful. It is truly an emperor's love wrought into living stone—as Sir Edwin Arnold wrote. On the gateway of the mausoleum there is an inscription in black marble.

There are two mosques in red sandstone on either side of the Taj, both of which are built in the same style as the gateway.

On the left side of the river is the tomb of Itimad Ud Dowlah, the father-in-law of Jehangir. It is an elegant but rather mechanical piece of architecture. In style it is half-way between Akbar's manly style and Shah Jehan's womanly style. The inlaying of marble with precious stones, which distinguishes all Shah Jehan's architecture, is here used for the first time on a large scale. On the same side of the river, beyond Itimad Ud Dowlah's tomb, is Chini Ka Roza. It is the tomb of a poet, and is adorned with exquisitely beautiful enamelled tiles, which give the name to the building. A part of its façade, which is crumbling, shows how Indian builders used earthen pots to lessen the weight of the concrete filling. A little farther on is the Zuhara Bagh, the garden palace of Zuhara, the daughter of Bahar. It is almost wholly in ruins now.

* There is hardly anybody now who believes that it was designed by an Italian.



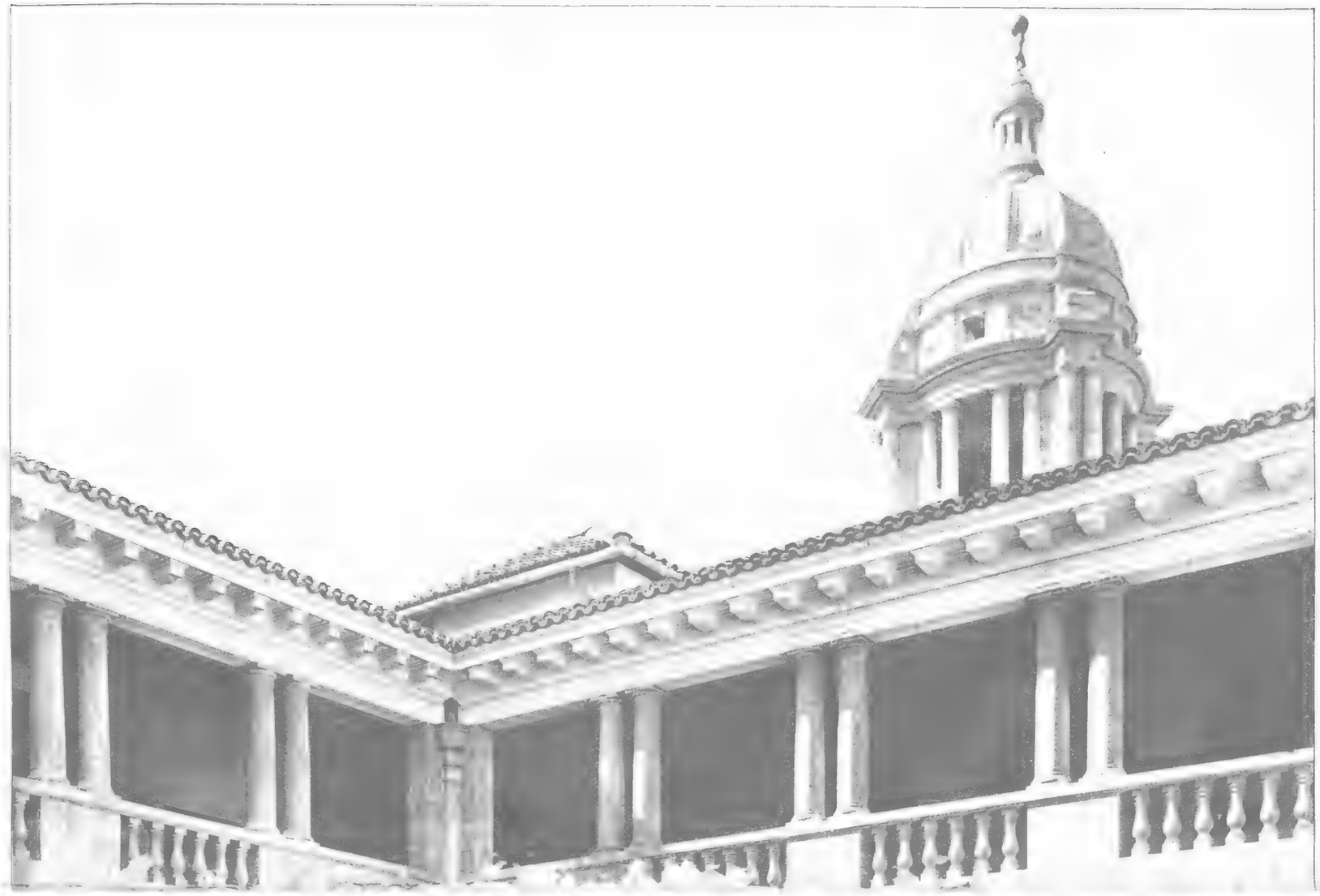
DIVINITY SCHOOL, OXFORD.

"INK-PHOTO" Wm BROWN & CO. LTD. LONDON, E.C.3.

UNION BUILDINGS. PRETORIA.

PORTICO ON CENTRAL AXIS OF GREAT CIRCULAR CENTRE BLOCK.

HERBERT BAKER. A.R.A., ARCHITECT



INK-PHOTO. Wm BROWN & CO. LTD. LONDON, E.C.3.

UNION BUILDINGS, PRETORIA. A COURTYARD.

HERBERT BAKER. A.R.A., ARCHITECT.

"INK-PHOTO" WM. BROWN & CO. LTD. LONDON, E.C.3

UNION BUILDINGS. PRETORIA.

HERBERT BAKER. A.R.A., ARCHITECT.

Architectural Education.

I.—The Student.

Photo: *Lewis, Birmingham.*

EASTINGTON HALL.

On examination of the programme of the R.I.B.A. Prize Competitions for 1924, it will be noticed that, whilst the method of adjudication and the age limit of entrants have been altered and more elasticity afforded in the various conditions of competition, the outside student is still very seriously handicapped. By the term "outside student" is inferred that class of student whose means and other advantages will not permit of entry. The competitions are for the most part confined to students of the recognised schools; the remainder are open to competitors obviously of the graduate and post-graduate class. In view of the ever-increasing but slow appreciation of architecture and what the Mistress Art stands for in the eyes of the public and the immediate prospect of registration for the practitioner, it is somewhat regrettable that the Board of Architectural Education have omitted to offer a better inducement to that class of student who may be possibly capable of great things, more so, perhaps, than the more fortunate student of the recognised schools. It is to the credit of the Architectural Association School of Architecture that it is perhaps the only body who recognises this possible student and gives him the much valued opportunity of entering the arena on the strength of talent alone. One is apt to forget what is now an accepted fact where social and economic conditions are concerned, that our forbears were, in the major sense, more prosperous and wealthy than the average individual to-day. The middle class, that *bête noire* of present-day economists, reveals to the fullest extent the rise or fall of comparative means; and, say what one will, the most of what is good in talent, capability and production is drawn from this class. It has been dubbed the backbone of the nation, for, not being blessed with a surplus of wealth on the one hand, and yet above the border line of extreme poverty on the other, its sons have always perforce drawn largely upon that very necessary force of energy and enterprise so essential to human progress. To-day and during the war the struggle for existence has been acute, so much so as to tend to render its nomenclature as a class in itself extremely doubtful, as various conflicting phenomena in the world of economics and social status have well-nigh squeezed it out of existence altogether. Fortunately by Divine Providence there will always be a third party to stabilise the eternal conflict between the rich and the poor, and its voice will and must be heard; for, by reason of its invidious position, it is best able to strike a happy medium in the ambitions of life.

The architectural authorities appear on the face of it to

Photo: *Lewis, Birmingham.*

GUILD HOUSE, HENLEY.

ignore the voice of appeal, adopting the somewhat snobbish principle that the class with money are to be wooed in their hunt for aspirants to the profession. Talent is but a secondary consideration. The middle class is passed over, and the poor artisan or craftsman is superseded without a word. The reader may raise the query: Why stigmatise in particular the architectural profession? Is not the same failing applicable to other walks of life? The answer is: The profession seeks recognition by Registration and other channels. If its policy of education is wide and open to all after examination, well and good; but in seeking to eliminate the unworthy and unqualified practitioner from its ranks the chances of training should be well within the bounds of the average pocket. No amount of Registration methods, if one may so use the term, will prevent this evil so long as the recognised schools are permitted unconsciously or consciously to set the standard of admission to the ranks. Either the number of these schools should be increased or the Board should offer other facilities to those of promise who cannot by reason of their slender pockets avail themselves of the existing schools in question.

In the middle class, which to-day cannot be considered by any means a wealthy one, there exists still extraordinarily good material, which is extremely badly catered for. It may be considered a bold statement, but I venture to state that it is quite impossible for a student of slender means to obtain a good architectural education, and what hopes this class of student had in the promised revision of the R.I.B.A. Studentships and Prizes are now dashed to the ground. Let us examine the list; but before doing so it would be as well to refute at the outset the argument that a too generous inducement or invitation to the poorer student would result in a lowering of the general standard of the professional status, and class it as pure nonsense, for, while offering the inducement, no one wishes to deny to the authorities their powers or exercise of discretion and discrimination in selection of deserving students. Such argument savours too much of the dressing gown, skull cap and frock-coat environment.

Taking the list as presented, one notices a goodly array of Jarvis Studentships, 14 in number, all tenable at recognised schools, for the benefit of ex-service students. Until what era is the term "ex-service men" to prevail?

Had these studentships been thrown open to outside students all over the country for entry to these schools, a double purpose would have been served, firstly attention to the profession as a possibility, and secondly a partial removal of the barrier of expense, bringing into the arena of architectural education an atmosphere of cosmopolitanism at present non-existent. Talking of cosmopolitanism, the high fees which are demanded of the student at any of the recognised schools denote only one type of the community, and it can well be argued that a student who can afford these fees (in the case of the Architectural Association 20 guineas a term) is hardly in need of a Jarvis travelling studentship, and this lack of foresight is on the face of it a colossal pity. Since the recognised schools are *de furore*, more entrance scholarships to these bodies are obviously needed. Further, with reference to those time-honoured institutions, the Tite and the Soane Medallion laurels, no one would wish to see a modification in these awards or the manner of their disposal beyond the stipulation to travel. Would not the £100 gained by the student in the Tite Prize be of more value to him if it was applied to his further educational expenses in the graduate or even post-graduate stage in preference to the stipulated foreign travel? It is well within the writer's memory of a case where the winner of the Tite Prize or the Soane Medallion lost a very lucrative engagement owing to his employers being either unwilling or unable to give him the necessary facilities and time to comply with the travelling condition of the award. This proves again that only a student possessing private means can hope to be

of sufficient independence to benefit by the travel. Further, it should be remembered that at the time of the inauguration of this prize time and financial conditions were by no means as stringent as they are at present.

This restriction, which the founders in their time could not possibly be expected to foresee, equally applies to the Measured Drawings Medal, and it might be considered feasible to combine this award with the best set of measured drawings submitted for the Intermediate Examination, Testimonies of Study, which are at present of such a perfunctory nature to comply with a certain standard which renders the task

RESTORED NORTHERN CONVOCATION HOUSE: HOUSE OF THE VICARS CHORAL.
MESSRS. TEMPLE MOORE & MOORE, Architects.

of their compilation more of a drudgery than a pleasurable incentive. I believe I am right in saying that whilst the Final Examination is granted the Ashpitel Prize, there is no equivalent prize in the case of the Intermediate.

The essential amount of spare time needed in order to prepare anything presentable for the Measured Drawings Medal is so limited as to render the competition, with its medal and £50, a luxury most students must forgo.

The advantages and disadvantages of becoming a Prix de Rome Scholar are too well known to need enumeration here. It is perhaps a little too early in the day to criticise, as with the progress of time due recognition will be given to the importance of the award, and it suffices to note that it is a crying scandal that the Government is so slow in recognising the scholars and the possibility of their employment in national schemes where architecture forms an important feature, such as Wembley, for example, and one can be so bold to say in this case that it is just possible that the Exhibition would not have suffered by some tangible evidence of their up-to-date scholarship and efficiency, not only from a design but also from a lay-out point of view. The appointment of Mr. Chalton Bradshaw to the Fine Art Commission is, however, a notable exception.

The Owen Jones Studentship is necessarily confined to students of the R.C.A. and other schools of art, as at the present moment the curricula of most Recognised Schools do not provide for such a specialised branch of study.

The Essay Prize and the Grissell Prize one can leave as at present.

Taking the list as a whole, it is to be considered a pity that the authorities did not make more elastic provision for those students of the category heretofore mentioned. These students must therefore, unless they are positive geniuses in the way of industry, perseverance and talent, have their names writ in the book of obscurity through no fault of their own. I can conceive of no better propaganda on the part of the Board of Architectural Education, especially at this stage, than to announce a series of studentships open to students all over the kingdom, the winning candidates to be able to enrol themselves as students of our leading schools, and to enable them in due course of time to take their place among the leading lights of the profession.

The test would have to be of no light character, and it follows that no better assurance of real inborn talent could be obtained, as the successful student would necessarily be on the threshold of his study unfettered by influence, good or bad, on his mental outlook, and the examiners would be in a better position to judge the promise or ability of the would-be student and consequent professional than the well-nourished and opulent graduate, who may possibly, after all, be devoid of " backbone."

The policy of " Recognised Schools " may become in the long run a clog on the legitimate aspirations of the Board of Architectural Education and of educationists in general, and one may be inclined to wonder whether that policy is not rapidly developing into an ill-balanced fetish. It is certainly not a broad policy, and the increased prestige attained by the R.I.B.A. through the amalgamation proposals will no doubt demand a broader outlook on architectural education and the existing facilities afforded. The present requirements of the Board as regards recognition are extremely drastic, and whilst an educational body of

a minor character is perhaps from various reasons unable to attain to the standard required by the Board from a syllabus point of view for insertion in the favoured list, it does not follow that it cannot contain material of a high order amongst its students, which is consequently handicapped. No one would be so foolhardy as to deny that the standard attained by the Recognised Schools is of a very high order, but there is a tendency to soar to dizzy heights in academic treatment of architectural design, and other aspects of architectural education, which renders it difficult for the product of these schools to descend from Utopian heights to bitter commonplace facts and details on which the bread and butter of the average practitioner so necessarily depends, and shows a somewhat erring deviation from the path of common-sense training. Again, there is a tendency in this so-called recognition to form an unhealthy and exotic combine of schools which are for ever engaged in competitive warfare for pre-eminence in the list amongst themselves, to the total exclusion of extraneous material. This competition, such as that between Liverpool and London, although it may be productive of much that is good in the way of research and revelation in the higher branches of the art, is at the same time utterly alien to the policy of cosmopolitanism and the increase of facilities which one would like to see in the architectural sphere. It promotes further an unwholesome craze for something new, and one rather dreads the future for the provincial or the external student if he is not cognisant with the latest Swedish or Dutch cult in design when he presents himself for examination for inclusion amongst the elect. He cannot be blamed if his work, based on "on the shelf" traditions, however excellent in itself, is hopelessly outclassed, as those schools are far and few between and not sufficient in number to enable him to keep in the trend of any pronounced development. With the advent of Registration—and let us suppose that the rather arbitrary proposals of the Union are adopted—the authorities will be more or less compelled to increase the number of schools, and instead of an expressed unwillingness on the part of graduates to leave the centre of activity, one may hope for the reverse—that is, a rush to undertake pioneer work in the provinces, assisting the central bodies not only in the task of furthering the cause of architectural education, but eventually, as a result of such work, sound the death knell of the unqualified, the half-baked intruder, and the jerry-builder, from which curse the country has far too long suffered.

Until that time comes—let us hope it will not be long—the Recognised Schools had best take heed of such warnings as were sounded by a Glasgow student in the professional Press recently, in which the following complaint is very near the truth, if not a trifle unduly pessimistic:

"I feel that I frankly and truthfully voice the opinion of the man when I say that the training of the young architect in the schools to-day is, unless perhaps to a few highly artistic students, futile. The strong, practical and sensible student who refuses to fall into the slap-dash, sometimes ridiculously over-rendered work necessitated by school work is by his own conscience chased out of the schools. In our own school, for example, as in many others, no doubt, far too much stress is laid on rendering, and it is quite a common occurrence to see a first year student, with little or no constructional knowledge, splashing blue backgrounds, trees, etc., on his sheet, to make up for his vagueness of effort as regards solidity and design itself—the courses themselves are overcrowded with a diversity of classes unparalleled in the history of architectural education. This diversity and crowding of classes demands hustle; hustle demands shoddy work highly rendered to screen practical deficiencies."

The student is rapidly losing confidence both in the favoured schools and outside, and with the future looming with more organised co-operative effort it is incumbent upon the leaders to see that the educational side receives its due and proper share in improved conditions.

"AJAX."

Building Progress.

The Quadrant, Regent Street (London), is just now in a state of transformation, and before long there will be very little, if any, of J. Nash's work left to give pleasure to people of taste and refinement. In any case, it is to be hoped that the County Fire Offices by Piccadilly Circus, the work (we believe) of William Abraham, will be spared indefinitely. Meanwhile architects and builders are busy, there being several independent reconstructions taking place in this portion of Regent Street. The block nearest to the Fire Office (we refer to the Café Royal, by Messrs. Henry Tanner, the architects) has Messrs. Trollope and Colls (Limited) as the general contractors, with the following sub-contracting firms:—Moreland, Hayne and Co., Ltd., for steelwork; R. Crittall and Co., Ltd., for heating; Higgins and Griffiths, Ltd., for electric lighting; Thomas Faldo and Co., Ltd., for asphalte; Express Lift Co., Ltd., for lifts; and Sturtevant Engineering Co., Ltd., for vacuum cleaning. It is impossible at this stage to form any fair judgment of the artistic value of the new buildings, though the architects will doubtless provide the satisfaction which we should expect from their work. We believe that Messrs. Yates, Cook and Darbyshire are the architects for Du Denry's premises, now under course of reconstruction farther down the Quadrant. The Edwards Construction Company, Ltd., are the general contractors; the steelwork is being undertaken by Redpath, Brown and Co., Ltd., and Diespeker's big span fireproof floors are being used. Nos. 92–94 adjoining are being rebuilt for Messrs. H. L. Brown and Son, Ltd.; Messrs. Hall, Beddall and Co., Ltd., are the general contractors. Immediately adjoining the last-named structure a large block is being erected for the re-housing of Aquascutum, Ltd. Messrs. Ford and Walton have the work in hand, with the following sub-contractors for steelwork, fireproof floors and asphalte respectively, namely, David Colville and Sons, Ltd.; Horace W. Cullum and Co. (Ltd.) and Ragusa Asphalte Paving Company. At the corner of Glasshouse Street and Regent Street, Messrs. Thomas and Edge are the general contractors for an important block, with the following firms as sub-contractors: Smith, Walker, Ltd., for steelwork; United Stone Firms, Ltd., for Portland Stone; Ragusa Asphalte Paving Co., for asphalte; Mumford, Bailey and Preston, Ltd., for heating; Marryatt and Scott, Ltd., for lifts; F. Bradford and Co., for fireproof floors; Wotton and Son for steel casements; Geo. Wright (London), Ltd., for pavement lights; and A. Goslett and Co., Ltd., for sanitary fittings.

The last block under reconstruction in, or contiguous to, the Quadrant to be noticed to-day is one at the corner of Vigo and Regent Streets, by Sir John J. Burnet, A.R.A., and Partners; it is just opposite to the one last mentioned. Messrs. P. and W. Anderson, Ltd., are the main contractors, Claridge's are supplying the asphalte; Diespekers with their patent big span F.P. floors; Waygood-Otis, lifts; R. A. Skelton and Co., Ltd., the steelwork; Young, Austen and Young are the engineers for heating, ventilation, h.w. service and cooking and steam plants; and the Crittall Manufacturing Co., Ltd., are supplying the metal casements. The somewhat turret-like treatment of the corner, with the apparent intention of a crowning dome, should prove sufficiently attractive. Later on we shall have to refer to the new Plaza Theatre, by Mr. Frank T. Verity, on a site at the corner of Regent and Jermyn Streets; at present it is barely, if at all, in the embryo stage; we note that Arthur Vigor, Ltd., are the general contractors, and Moreland, Hayne and Co., Ltd., will supply the steelwork. But close by, on an island site at the corner of Haymarket and Jermyn Street, is being erected an important 7-storey block, with the same firm as last mentioned as general contractors, and the following sub-contractors: Smith, Walker, Ltd., for steelwork; The Morris Westminster Metal Works for casements and metal work; S. Mulliner, Ltd., for heating and ventilating; Grierson, Ltd., engineering and electrical contractors; C. Isler and Co., Ltd., for artesian wells; and Express Lift Company for lifts. In Suffolk Street, Pall Mall East, we notice there is in hand an extension of Sir Reginald Blomfield's interesting United Universities Club, erected in 1906. James Carmichael, Limited, are the contractors, and the steelwork is supplied by Drew-Bear, Perks, Ltd. At the junction of St. Martin's Lane and St. Martin's Place, the Westminster Bank is engaged upon one of its numerous alterations or extensions to branches, the one now under notice carrying on the general lines of the adjoining Westminster City Hall. F. G. Minter is the contractor; Smith, Walker, Ltd., are supplying the steelwork, and Thomas Faldo and Co. the asphalte.

General News.

BALHAM.—The L.C.C. Education Committee recommends the tender of Messrs. J. & C. Bowyer, Ltd., £38,750, for the erection of a secondary school at Beechcroft Road.

BARNET.—A site in Mays Lane is being obtained by the Herts County Council for the erection of an elementary school.

BATTERSEA.—Plans have been prepared for a tuberculosis dispensary at an estimated cost of £8,564 and a maternity centre at a cost of £9,270. Messrs. Lacey & Jackson have submitted plans on behalf of Messrs. E. & T. Beacon for a factory in Sleaford Street and Ascalon Road.

BOURNEMOUTH.—The Corporation have accepted the tender of Messrs. Turl & Sons, £7,025, for the extension of the police station.—It has been arranged that Messrs. Hawkins Bros. shall erect five blocks of flats on the Southill Estate on the same basis as their tender for two blocks.—Plans have been passed for a new road on the Cedar Trees estate from Messrs. Lawrence.—Tenders are to be invited for adapting "Woodcote" for use by the School for Girls.—A site is to be secured for a new clinic. The Borough Engineer is to prepare plans for extensions at the Malmesbury Park School and the conversion of the Lansdowne School into a central school.

CAPETOWN.—The Corporation have decided to establish a native township at a cost of £250,000. Accommodation will be provided for 5,000 and the township will be administered on economic lines and not subsidised from the rates.—The Corporation under a Provision of Homes Ordinance have granted loans to 260 applicants, totalling £209,355.—Municipal employees living in insanitary conditions are to be compelled to move to vacant municipal cottages.

EASTBOURNE.—The Borough Surveyor is to prepare plans for the extension of the maternity home.—The tender of Messrs. Waygood-Otis, Ltd., £532, for the provision of a lift at the town hall is recommended for acceptance.

HACKNEY.—The Borough Council Electricity Committee recommend the tender of Messrs. J. Jarvis & Sons, Ltd., £33,600, for erecting showrooms and offices.—It is recommended that the tender of Messrs. Bell Bros. (Manchester), Ltd., £2,370, be accepted for the provision of filtration plant at the baths.—Plans passed: 2 houses, Grove Lane, for Messrs. J. Garey & Son; storage premises, Broadway, London Fields, for Messrs. J. & B. Connolly.

HARTLEY WINTNEY.—A site is to be purchased by the Hampshire County Council for a new elementary school.

ISLINGTON.—The Borough Council have passed plans for six houses in Petherton Road.—The Health Ministry have sanctioned the scheme for the erection of dwellings in Tyndale Street at a cost of £61,250.

LEWISHAM.—The L.C.C. Education Committee are to ask Messrs. Holland & Hannen & Cubitts, Ltd., contractors for the Womering housing estate, to tender for the erection of the second section of the elementary school, for which the Committee has voted a capital expenditure of £27,000.

LONDON.—The L.C.C. have approved drawings of:—Building to be erected on the site of Nos. 55 (east) to 59 Strand; building to be erected on the site of Nos. 60–64 Strand; shops proposed to be erected on lot 3, Tooting High Street; shops proposed to be erected in Gray's Inn Road; and sanctioned alterations at 1 Great James Street and 54 Theobalds Road, 158 High Street, Shoreditch, and 15 Tower Bridge Road.

LUTON.—The Borough Engineer has been asked to prepare plans and specifications, with estimate of the cost, for improving and widening George Street (Market Hill) after the street market has been discontinued, by transferring the Ames Memorial to another site and by throwing into the carriage-way a considerable portion of the paved area on the north, east and west sides of the Corn Exchange, so as to provide more space for vehicular traffic.—The Town Council have sanctioned the erection of an electricity sub-station in the neighbourhood of Turners Hill, notwithstanding protests that it would be a grave injustice to the many property owners in the immediate neighbourhood.—Plans have been passed for seven houses in Ferndale Road for Mr. W. J. Ashton and alterations and additions to the George Hotel, George Street, for Mr. A. E. Fisher.

NEWPORT (MON.).—The Corporation have decided to purchase St. Julians Mansion and 10 acres of land for £4,000—the mansion to be used for educational purposes and the land for pleasure grounds.—Hatherleigh House is to be purchased for £5,350 for educational purposes.—A scheme for street improvements costing £100,000 has been prepared.—Plans passed:—for new Labour Hall, James Street, Mr. A. E. Sheppard, and 9 dwelling houses, Rothesay Road, Mr. A. D. Davies; four houses, Buckingham Place, Messrs. Gibson Bros.; four houses, Balmoral Road, Messrs. H. Budgen & Co.; Sunday School, Jenkins Street, Messrs. Griggs & Vaughan.—The Health Committee are negotiating with butchers as to a suitable site for a public abattoir.—Land is to be acquired for the extension of the Allt-Yr-Yn hospital.—The Borough Surveyor has prepared plans showing the proposed widening of George Street and Dock Street.—The War Office have intimated that they cannot let the Newport barracks for housing purposes as troops will be sent there in the autumn.—The Health Committee suggests a clause being inserted in the next Parliamentary Bill empowering the Corporation to prevent persons living in tents, vans or similar structures from pitching or erecting such structures within 300 yards of a dwelling house, and to require the owners to properly drain all unbuilt upon land not in use.—Sir William Arrol & Co., Ltd., have commenced the construction of the new Newport Bridge. Sketches of designs of the parapet have been submitted to the Corporation, and amended sketches, of Gothic design, of the parapet to be constructed of cast iron, have been called for.—The Borough Engineer has prepared details of suggested sites for the new town hall.

PUTNEY.—A social hall is to be erected for Miss Grace Mills in Ravenna Road.

STOCKBRIDGE.—The Council School is to be enlarged by 90 places by the Hampshire Education Committee.

STOKE-ON-TRENT.—A committee of the Town Council have discussed the desirability of acquiring the Palais de Danse, Hanley, and recommend the Council to purchase a portion of the site for £18,000.—A public library is suggested for the Smallthorne district.—Plans are under consideration for the extension of Stoke Market.—A sub-committee have been appointed to consider the provision of an abattoir.—The Borough Surveyor has prepared plans for levelling the Smallthorne recreation ground at a cost of £575.—Mr. E. B. Sharpley, town clerk, has reported that Messrs. Lloyds Bank Ltd. wished to make certain alterations in the banking section of Hanley Old Town Hall, and asking whether there would be any objection to the closing of the passage door on the Fountain Square side of the building.—The Bank are to be asked to submit a detailed plan of the proposals.—Loan sanctions are proposed of £6,000 for gas showrooms at Hanley and £8,750 for road repairs.—A site is to be secured for 25 houses at Norton.—Twelve houses are to be erected on the Fenton site, and 12 on the Hanley Estate.—The Town Clerk has reported that housing aid in the way of freedom from rates for a period of years would largely exceed the present lump sum subsidies.—The Borough Surveyor has been instructed to prepare plans for six houses on the Gorlict Street site, Burslem.—The Gas Committee propose an expenditure of £18,626 on mains, etc., subsidies promised on 22 houses.—Messrs. W. Sherratt & E. Austin, off High Lane, two houses; Hanley, Mr. J. Wood, Greasley Lane, Abbey, two houses; Stoke, Mr. T. Horwill, Longfield Road, Harpfield, two houses; Mr. W. Ball, Trentham Road, Oakhill, two houses; Mr. W. Ball, off Trentham Road, Oakhill, four houses; Mrs. E. G. Brown, Harpfield Farm Estate, two houses; Longton, Mr. G. Wall, Trentham Road, Blurton, two houses.

STRAND.—This famous thoroughfare is apparently to be uncompleted. Widenings in piecemeal fashion have been going on for a quarter of a century and now further delays are occurring at the Waterloo corner. A report of the L.C.C. Improvements Committee mentions that attention having been drawn to the fact that the portions of the structures at 10 Lancaster Place and 1–7 Wellington Street, not yet demolished, had been sub-let to a company who propose to form lock-up shops surrounded by a bill-posting hoarding above first-floor level, they asked H.M. Office of Works to consider whether an alternative scheme could not be devised which would be in keeping with the neighbourhood. They are now informed by H.M. Office of Works that the proposal to erect a building on the Lancaster Place site had to abandoned for financial reasons, and that there is at present some uncertainty as to the future user of the site; that in these circumstances, when it became necessary to demolish a portion of the buildings to conform with the Council's arrangements for the widening of Wellington Street, some screen was thought to be desirable to conceal the unsightly portion of the partly demolished premises; that the Board considered that a properly constructed advertisement hoarding for, say, three years would effectually achieve this object, and at the same time produce revenue in relief of taxation; that it was also felt that, while there might be objections on æsthetic grounds to advertisement hoardings in this position, such objections lost much of their weight at the present time by reason of the fact that extensive building works would be in progress for a considerable period on the adjoining site, round which also an advertisement hoarding had been erected; that in these circumstances the Duchy of Lancaster were consulted and agreed to permit the display of advertisements

and that it was hoped that the Council would not press its objections to the hoarding.

WANDSWORTH.—Plans passed: 9 houses, Ravensfield Road, Balham, for Messrs. Swain & Selby; 5 houses, Upper Tulse Hill, for Mr. W. Davies; 4 houses, Tankerville Road, Streatham, for Messrs. E. Midmer & Sons; 16 houses, Fishponds Road, Balham, for Mr. A. G. Jenkins; 4 shops, Tooting High Street, for Mr. L. S. Rogers; pavilion in King' George's Park and Furzedown Recreation Ground, for Messrs. Humphreys, Ltd.; 32 houses, Cricklade Avenue, Streatham, for Messrs. F. T. Wooding & Sons; 10 houses, Gateside Road, Balham, for Messrs. Humphrey & Allen; 30 houses in Hebdon Road, 42 in Fishponds Road, and 42 in Ansell Road, Balham, for Messrs. Swain & Selby; 3 houses, Mount Ephraim Lane, Streatham, for Messrs. Cook & Co.; 3 houses, Ellerton Road, Springfield, for Messrs, Holloway Bros. (London), Ltd.—The baths at Tooting are to be enlarged at a cost of £2,100.

WILLESDEN.—The Borough Engineer has prepared alternative schemes for the provision of slipper baths and a washhouse at St. Cecilia's Mission Hall.—In regard to a proposal for a new Town Hall a Committee suggest that a site inWyne Road should be appropriated for the scheme.—Plans are to be prepared for offices of the Juvenile Employment Bureau on a site in Pound Lane.—The Council has prepared relief schemes as follows: Neasden Valley main sewer, £41,000; surface water culvert in Edgware Road, £7,750; North Cricklewood sewer, £27,250; asphalting roads, £20,000; and football pitches, £5,700.—The Housing Committee cannot accede to the request of Messrs. Pearce & Taylor to be permitted to use hollow brick blocks in external and party walls.—Plans passed: extension of Donnington Road, for Messrs. Done, Hunter & Co.; 6 houses, Herbert Gardens, for Messrs. Jermey & Son; 8 houses, Donnington Road, for Messrs. Done, Hunter & Co.; 6 houses, Hanover Road, for Messrs. Fricker & Smith; 4 houses, Holland Road, for Mr. E. Drown,; 7 houses, Aylestone Road, for Messrs. Western & Arnell; 3 houses, Anson Road, for Mr. T. H. Potter; 12 houses, Northway, Neasden, for Messrs. Marks & Gullet.—A scheme has been prepared for rebuilding the small pox hospital at Kingsbury at an estimated cost of £8,390.

International Congress on Architectural Education.

The Executive Committee for the Congress desire to draw attention to the Exhibition of work of Schools of Architecture which will be held in connection with the Congress. About fifty schools in Great Britain, the British Dominions and foreign countries will participate, and in view of the large number of exhibits it has been found necessary to obtain the use of Devonshire House and Grosvenor House in addition to the Galleries of the R.I.B.A. The Exhibition will be a remarkable example of the work done in Schools of Architecture all over the world and should prove of very great interest to all architects.

In Devonshire House, Piccadilly, there will be exhibits from the schools in Great Britain and the British Dominions, together with a selection of drawings prepared by R.I.B.A. prize winners. while in Grosvenor House the work of Schools abroad will be shown.

The R.I.B.A. Galleries will contain a selection of work done at the British and French Schools and the American Academy at Rome, and there will also be an exhibition of educational books and equipment.

The Exhibition will be open from July 28th to August 2nd inclusive, from 11 a.m. to 9 p.m. daily.

Tickets of Membership of the Congress, price 10s. 6d., to include admission to the Exhibition, catalogues, and a copy of the Congress Book of Proceedings, may be obtained from The Secretary, Board of Architectural Education, 9, Conduit Street.

Tenders.

MIDDLESEX.—For erection of new county school for boys at Chiswick, for the Education Committee of the County Council of Middlesex,fromplans prepared by Mr. H. G. Crothall, F.R.I.B.A., County architect. Tenders:—Godson, G., and Sons, Ltd., Kilburn, £33,870*; Dickens, W. J., Ealing, £34,000; Bollom, Geo., Acton, W., £34,200; Challis, Geo., Brentford, £34,250; Daley, Wm., & Co., Acton, W., £34,350; Knight, H., & Son, Tottenham, £34,388; Monk, A., Lower Edmonton, £35,280; Newby, C. J., & Bros., Southgate, £35,300; Lovell, Y. J., & Sons, Gerrards Cross, £35,345; Lacey, W., Hounslow, £35,835; Lawrence, W., & Sons, Ltd., Finsbury Square, E.C., £36,251; Ferris Bros., Acton, W., £38,499. *Recommended for acceptance.

The London and North Eastern Railway Co. are erecting, at a cost of £90,000, a new steel viaduct at North Seaton, Northumberland, over the river Wansbeck.

Trade Notes.

In connection with the developments and extensions of the London Underground Electric Railways, Messrs. Waygood-Otis Ltd., have fitted some new type escalators at the Bank Station of the Central London Railway and Moorgate Street Station of the City and South London Railway. These escalators are designed to carry 8,000 passengers per hour in a continuous stream, and the great advantage of this method of conveying a large number of people over the previous arrangement of lifts is shown in the rapidity with which the crowds leaving the trains, especially at the Bank Station, are conveyed to the upper level. At the Bank Station there are three of these escalators, which are so arranged that while one machine is dealing with the passengers in the upward direction, and one descending, the third one is available for running in either direction, according to the traffic at any particular time of the day. Either of these can be easily and simply reversed if required. At Moorgate Street Station there are two of these escalators in operation, which are also reversible. These machines are built with a width of about 4 ft. between the handrails, which move simultaneously with the steps. Special attention has been given to safety provisions to guard against any failure or the breakage of any of the working parts. The machines for driving the escalators are of worm and wheel pattern, with special electric motors. Messrs. Waygood-Otis, Ltd., have in hand 16 similar escalators for the Underground Railway Company and 8 for the Italian Railway, and have recently completed 3 escalators for the Sydney Harbour Board at Lavender Bay.

How letters were alleged to have been stolen from letter boxes was described at the hearing recently at West London Police Court of charges against five men of stealing a cheque for £57 and forging it in an attempt to cash it. The evidence was to the effect that whilst some watched, one of the party went to doorways and placed his hand in a number of letter boxes.

Thanks to a clever invention the wiles of the burglar, tramp, or "Paul Pry" have been smartly encountered. The British "Burglarm" Bell Knob Co., of Skinnergate, Darlington, have placed upon the market an efficient, strong and inexpensive door furniture which provides 100 per cent. security against trespass, as also smartness and general efficiency. Briefly, the chief points of advantage claimed by the "Burglarm" patents are:—

1. The bell push is contained in the door knob—the right place.
2. Using of letter box automatically rings the bell—no more delayed letters and papers.
3. Turning of knob right or left gives warning of attempted entrance. This latter control can be switched on or off from inside door.

It is found in practice that a feeling of confidence exists in the minds of those left in the house, day or night, in cases where the "Burglarm" patent has been installed, and whilst this new door furniture—attractive in appearance—is in much demand for new houses, the fact that it is simpler and easy to fix to existing bell wires lends support to the claims of the patentee, Mr. A. E. Oates, of Darlington, for its wide-spread use for banks, offices, stores, hotels, etc. As also as a protective measure for all homes.

Messrs. Benjamin Electric Ltd., whose chief address is Brantwood Works, Tariff Road, Tottenham, N.17, write us in reference to our recent notes on the Empire Exhibition as follows:—

"With regard to your reference to our firm a mistake has been made, due apparently to the original mistake made by the Exhibition authorities in the Official Guide; the mistake is in the address, and you will notice from this letter heading our address is Brantwood Works, Tottenham." Messrs. Benjamin, Ltd., are commercial and industrial illuminating engineers, and manufacture all kinds of electrical specialities."

Messrs. Eastwoods, Ltd., whose head offices are 47 Belvedere Road, Lambeth, London, S.E.1, despite the many difficulties caused by the railway strike and the dockers' unofficial strike of January and February last, are enabled to present to their shareholders a very satisfactory account of their year's trading. Their fourth annual meeting was held on Tuesday last at the Cannon Street Hotel, and a dividend was declared of 7½ per cent. for the year ending March 31 last, less income tax. The directors and staff are to be congratulated at being in a position to show such excellent results, and further with the wisdom of making adequate provision for depreciation of plant, machinery, etc. Messrs. Eastwoods are the largest firm of builders' supply stores in the country, and are also brickmakers, with extensive brickyards. The company have recently introduced "Sika" waterproofing material, a liquid which, when mixed with the cement, makes the cement not only waterproof but increases the tensile strength. It is suitable for all classes of building, but is of very particular value for tunnels, basements, storage tanks, etc. The company anticipate a big demand for "Sika," and are prepared accordingly.

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Mr. Wheatley's Dogmas on Housing.

In his reply to criticisms made on the Housing Bill Mr. Wheatley—whose sincerity and honesty all of us recognise—made statements which should be carefully weighed by those who have given him their support. He asked: "What was private enterprise but an effort to make money out of the needs of their neighbours?" We may well ask whether, if we did not consider what the community needed, we should have a chance to sell anything at all, and whether those who do any kind of work are not attempting to make money out of the need of the community for the work in question.

He further asked: "Was not the idea that it was wrong to put up prices when they could be raised something that was only introduced into public life by Socialist propaganda?" But as all prices of materials are largely made up of the cost of labour used in producing or working them, it follows that the Union which strikes for an increase of wages because it thinks it can be obtained is doing what is wrong according to the Socialist gospel, though we have never heard Labour leaders trying to bring this fact home to the offenders!

Mr. Wheatley hopes that the time is coming when "every man who got wealth in this country would have to justify the means by which he obtained it." The whole of the foregoing statements seem to us to be based on the extreme dislike and distrust of all those who have hitherto been able to make their way in the world without assistance from the State, and foreshadows the determination of the party of which Mr. Wheatley is a spokesman to institute an intolerable system of tyranny and robbery which would bring this country to a parallel state to that of Russia.

The new housing measure has been exposed and condemned by criticism based on facts which cannot be disputed, and it is lamentable that a once great political party, which professes equally with the Conservative party its opposition to Socialism, should have helped to make up a majority for the third reading of the Housing Bill; but it will, like many other measures which have become Acts, prove inoperative because it is based on fundamental error and because it ignores economic laws.

The Chamberlain Act was designed to give relief by aiding those who could partly finance their undertakings by the smallest amount of State assistance, and was admittedly a step towards the end of State interference with housing. And by helping those who could help themselves the Act set free accommodation for the less fortunate. So it is utterly unfair to judge it on the number of houses solely to rent built under its operation. The Act was meant to help the owner-occupier, but in doing so helped the tenant who could not at present become an owner. It also helped those who had courage and enterprise enough to once more build houses for letting, and Mr. Wheatley's gibes at private enterprise fall very flat. Admittedly no one would speculate in housing unless they could see some return on the money invested, but this seems to us reasonable.

Under the new measure private enterprise and private speculation are discouraged and practically banned. Instead State assistance, whether direct or indirect, is increased, the municipalities and local authorities are urged or compelled to build, and in order to administer the property so created a huge body of rent collectors and inspectors will have to be appointed, the cost of which will fall on the ratepayers.

Unless we are inspired by the Socialist hatred of everyone who is not in receipt of State aid or who does not draw a State salary, should we not be reasonable in balancing the private owner's profits out of his investment with the cost of local management; and unless we found the last very much less, should we not judge the merits of each system by such a test?

Moreover, the extraction of money from taxpayer and ratepayer inevitably decreases the amount of capital which can be employed in industry, which is clearly undesirable in the interests of the worker, leaving out of consideration all other factors.

Unfortunately those at present in power may be likened to men who are lighting a train of powder which will blow up a magazine of explosives, and those who look on are amused and interested at seeing the small running fire without considering its ultimate and inevitable end, which is the destruction of that stable prosperity under which many generations have lived and found employment.

We have an example of the complete Socialistic State in Russia, while history records many smaller attempts of the same nature, all of which have resulted in failure and chaos.

Discontent with our present condition is by no means an entire misfortune; it may become the means of good by inducing men to make greater efforts to secure what they desire. Such discontent is divine, and leads to the increase of the potential wealth of the community, but the discontent which takes the form of robbing Peter to pay Paul will in the end make a nation bankrupt.

We believe we may be on the eve of developments which will eliminate all necessity of spending State funds in the provision of housing, and that such a consummation will be brought about not by Governmental machinery, but by the invention of newer methods of construction and material, and it seems unfortunate that Mr. Wheatley should not have waited a little before formulating schemes which, we believe, will prove absolutely unnecessary.

The insurmountable factors have hitherto been the belief of a majority that a new heaven and earth can be built up without effort and at the expense of a small section of the community, the obstructive tactics of organised building labour, and the perversity of those who believe in the efficacy of legislation to make good Labour's deficiency.

Success in the late war was probably due more to the efforts of inventors than to other causes, and but for them the submarine campaign might have had another ending, and we believe the housing problem may be solved in a similar manner. But it is known the inventors of the tank had many difficulties in obtaining

support; so it would seem in the matter of housing methods there is a disposition to look with too much suspicion on the proposals of those who urge the application of new methods of construction and the use of new materials, but it is probably by the utilisation of these rather than by the persecution of the more fortunate section of the community that we shall attain the end desired.

Complete Socialism would, of course, deprive the inventor of his reward, while utilising it for the benefit of the community; but we may have a little interlude before Mr. Wheatley and his friends are able to introduce their millennium, which we sincerely hope will prove more workable and less open to criticism than is Mr. Wheatley's Housing Bill.

It will be noticed that in our account of recent housing prospects in the United States the cubic rates of building there are not in excess of those current in this country, in spite of the very high rate of wages paid, which is a further proof that it is not the question of wages that stands in the way of cheaper building, but that of production. This fact is realised in America, with the result that the whole community prospers, and it is the English workers' disregard of this fundamental truth to which we owe the bulk of our present difficulties.

Our Illustrations.

REBUILDING OF 36-44 MOORGATE FOR THE OCEAN ACCIDENT AND GUARANTEE CORPORATION, LTD. SIR ASTON WEBB, P.R.A., AND MAURICE E. WEBB, Architects.

CLOCK IN THE BASE COURT, HAMPTON COURT PALACE. Sketch by W. T. BENSLYN.

BOYS' SECONDARY SCHOOL, WORTHING, SUSSEX. HAYDN R. ROBERTS, Architect.

EAST END, ST. MARGARET'S CHURCH, PUTNEY. H. P. BURKE DOWNING, Architect.

Thoughts on Architectural Education.

We will state conclusions which have been slowly arrived at and are based on thoughts suggested by the work of students of the various schools which we have seen in recent years. Our conclusions may or may not accord with those of others, and may by them be dismissed as being wrong or impracticable, but they may still be of some value and supply food for reflection.

We are convinced that too much importance is now attached to "rendering," especially colour rendering, and that a large part of the time spent in designing large and ambitious projects might be better employed by the student.

We do not undervalue draughtsmanship, for good draughtsmanship is essential, but we would rather see less time spent in the by-ways of presentation and more on the actual tones of form. French architects have their methods, with which they are presumably satisfied, and America has its educational system, which is largely based on that of France, but neither are necessarily what is best suited to our requirements.

What we feel about much of our students' work is that it is too much based on books and too little on the actualities of building, and our students sometimes seem to us to be encouraged to run before they are really able to walk.

Sometimes we see work which reminds us of the efforts of a precocious child, which excite wonder and notice, but give the impression that the student is attempting to do work beyond that suitable for the stage of education which he has legitimately reached.

We may here ask ourselves what designing power is, and how it may be best fostered.

We do not believe that many men are born designers—that is, instinctively imbued with a creative faculty. We do believe that men vary infinitely in their power of assimilation, and it is, we believe, more that power of assimilation on which great design depends than on any other factor. This being assumed, the question remains, how can the student be brought to assimilate what is really essential if he is to become a designer? Culture has been defined as the memory of what we have forgotten, and this clever definition brings us to the kernel of the question. We can make a design, aiding ourselves with books at every step, and checking the results by reference, or we may, on the other hand, be so imbued with actual knowledge that we are no longer impeded by the necessity of reference. The only way in which such facility can be acquired is by the two laborious processes of measuring and sketching, and it is precisely these two processes which seem to us to be overlooked by most of the schools. If a very large part of the students' time was given up to these two forms of study, we believe the students passing through the schools would infuse into their designing work a sense of vitality and reality which is too often missing. Students might usefully help to collect the material needed for the County Council's Survey of London and similar undertakings elsewhere.

It is, of course, necessary and proper that the student should exercise himself in design, but here it is questionable whether the subjects set might not be more usefully selected. We would give them two buildings in a street separated by a vacant space, and ask them to design a front of a certain number of floors which would best accord with its neighbours as part of a street design.

Then, again, we might give them plans and elevations of an existing public building and set them the problem of showing how additions could be made to accord with what already existed. There is no reason why advanced students should not try their skill on much greater tests, such as designing a new West Front to Westminster Abbey to replace its two existing towers, or designing a memorial chapel to form part of the group.

Our country railway station is often an eyesore, and it would be interesting to see what a student, given the existing accommodation to work on, would be able to effect.

The alteration and enlargement of a house or its conversion to other purposes would be another interesting and useful type of subject.

The same talent might be as usefully expended and evidenced in the solution of such tests as in that of a nobleman's country house on the edge of a lake, and backed up by a forest, or a Triumphal Arch designed to commemorate a national victory, or any of the poetical suggestions often made to stimulate the designers' energies.

And might it not be reasonable to include by arrangements with contractors a term of a year or more to be passed in a contractor's employ, in order that the student should be brought into contact with the actual processes of building? This would involve negotiation and conferences between those organising the schools and the builders, but we have no doubt that the latter, if approached, would willingly help such a scheme. We are quite aware that the pendulum of opinion in its swing must tend to move from one extreme to another, and this is what we are inclined to think has happened.

Years ago we were left to acquire our experience how we could, and many of us remained to all intents and purposes

uneducated, except in a rough makeshift way, to the great detriment of the work we attempted to do.

The architectural schools have done and are still doing a great work in removing these defects, but, useful and valuable as they are, they seem to us to be developing in some directions which need modification.

We are quite conscious that those who do things expose themselves to criticism, and that criticism is often easy, but we make these remarks without in any way wishing to disparage a movement which has conferred many benefits on the present generation, benefits which must leave their trace on modern architecture.

THE COURT OF THE KUWAT-UL-SELAM MOSQUE AT THE KUTAB MINOR COURT,
surrounded by cloisters of Jain pillars which remain from the Hindu Temples destroyed by the Mohammedans in taking Delhi.

Boys' Secondary School, Worthing, Sussex.

This is a good example of a very simply designed modern school on the open-air or Derbyshire type, the rooms being reached by a verandah round four sides of a central quadrangle. The whole school is most economically planned and carried out, the entire woodwork being stained with Solignum, and the roof covered with asbestos roofing. The architect was Mr. H. R. Roberts.

British School at Rome.

The designs prepared by the candidates who competed in the Final Competition for the Rome Scholarship in Architecture, 1924, and the R.I.B.A. Henry Jarvis Studentship, 1924, will be on exhibition in the R.I.B.A. Galleries from Tuesday, 5th August, to Friday, 15th August inclusive, between the hours of 10 a.m. and 6 p.m. (Saturdays 1 p.m.).

The Prizegiving at the Architectural Association.

On the 25th Mrs. Winston Churchill gave away the prizes at the Association schools, in the presence of a large and enthusiastic meeting. Mr. Winston Churchill made an admirable speech, in which he said that the course of politics was entirely determined by the shape of the legislative chamber, the oblong form of the House of Commons with its central gangway making for a sharp division in politics, while the semi-circular form affected abroad allowed of the growth of groups insensibly shading into one another from right to left. Although humorously meant, there is little doubt that there is a substratum of truth in the remarks made. Mr. Churchill also referred to the invention of new systems of construction as being the probable means by which the housing question would finally be solved.

International Exhibition Buildings, Amsterdam.

His Majesty's Consul General at Amsterdam (Mr. H. Tom, M.B.E.) reports a call for tenders for the supply of a portable structure to be used as an opera and exhibition hall in connection with the International Tobacco Exhibition to be held in Amsterdam in May, 1925. United Kingdom firms in a position to supply British materials can obtain further particulars of this call for tenders on application to the Department of Overseas Trade, 35, Old Queen Street, London, S.W.1, quoting reference A.X. 1188.

Competition News.

In connection with the proposal of the Wimbledon Corporation for the erection of a new town hall, a sub-committee has asked Mr. Herbert Emerson Smith, the town clerk, to arrange for a deputation to visit the town halls of Battersea, Chelsea and Marylebone. He is also to communicate with the town clerks where town halls, with public halls and municipal offices have been erected within comparatively recent years, and ask for copies of the memorandum issued to architects in connection with the submission of competitive designs for such buildings.

Competitive designs asked for row of shops with hotel over. £150 for selected design. It is not stated whether winner will have the work to carry out. Further particulars from Mr. H. Walduck, Imperial Hotel, Russell Square, London, W.C.1.

University of London, University College.

The following awards have been made at University College: Faculty of Arts (Bartlett School of Architecture):

Lever Prizes in Architecture, first prize (equal), Leonora F. M. Payne and C. H. Short. Architects' Journal Essay Prize, J. N. Summerson. Herbert Batsford Prize, P. A. Wailes. Donaldson Silver Medal, J. R. Alabaster. Ronald Jones Prizes, (Mediæval Architecture) J. N. Summerson, (Renaissance Architecture) H. Kendall. Ronald Jones' Travelling Studentship, C. H. Short.

Certificates in Architecture, under the new regulations (three years' course), have been obtained by Penelope G. Carmichael, J. F. L. De Silva, Sylvia C. Gray, R. G. Grice, H. T. B. Griggs, H. A. Johnson, G. F. Kelly, J. T. Lloyd, D. M. Micklethwaite, Z. Panitch, Leonora F. M. Payne, Elizabeth C. C. Philip, S. D. Wheeler.

In the Department of Town-Planning: Lever prizes in town-planning, first prize H. W. J. Heck, second prize L. M. Austin.

Certificates in Town-planning have been obtained by L. M. Austin, J. P. Blake, H. W. J. Heck.

The Swinton Urban District Council are considering new sewerage and sewage disposal works for their district. The consulting engineers are W. H. Radford & Son, Albion Chambers, King Street, Nottingham.

Tangier.—I.

H. Guy Holt, A.R.I.B.A.

GENERAL VIEW OF TANGIER.

The first sight of Tangier, approached from the sea, rising tier upon tier, as it seems, of square masses of masonry, white, pink, cream, and backed by the green of the beautiful "mountain" of Tangier, is not one easily forgotten.

The bay itself is a beautiful one, with a wide curving sweep terminating in the hilly country of the Spanish Zone, where fighting is nearly always taking place in the turbulent Riff country.

Separated from that *Rock*, the emblem of Britain's oversea power, by a short but nevertheless oft-times trying sea trip of about 30 miles, Tangier must always prove a source of attraction to the Englishman abroad, if only on historical grounds, for the town formed part of the dowry of Catherine of Braganza on her marriage to the Merry Monarch.

Very soon, however, it was to pass out of the hands of the British, who built the mole, withdrew the garrison in 1684 and on withdrawal demolished the mole, or most of it, for a tiny portion still remains to show the interested stranger a relic of Britain's once powerful hold on this part of Africa.

The subsequent history of Tangier from a political point of view is varied and different. European powers have at times endeavoured to arrogate to themselves the chief prerogatives, always without success. The political squabbles of the Great Powers came to a head, and it was decided to hold a conference at Algeciras, that town of South Spain well known to tourists as the southern terminus of the great Spanish railway, whence the "Sud Express" rushes northward through Cordoba to Madrid and Paris twice a week.

The conference brought forth a treaty of sorts, named the Act of Algeciras of 1912, which decided that the status of the town and zone of Tangier, consisting of about 360 square kilometres, should be left to become the object of some special arrangement.

Strategically, Tangier is a most important point; separated only by a narrow water channel from Gibraltar, it can dominate one side of the Straits, hence Britain's interest has always been to maintain some state of neutrality if not of predominating influence in Tangier.

During the war period France, by means of propaganda and the building of French schools, has brought about a state of affairs which sometimes brings about conflict with British political interests in the town and zone.

Not only so. Spain, immediately across the Straits, and with a small zone of influence on one side of Tangier and her main zone of influence on the other, considers *her* interests in Tangier of supreme importance.

There is no doubt whatever that during the last three or four years, during which fighting with Raisuli and subsequently the Riff tribes who followed his guidance, Tangier has been a hotbed of intrigue, spies have abounded, and gun-runners and others interested in the sale of munitions, aeroplanes, etc., to the Moors have used the freedom of this international town to some purpose.

Naturally the Moor, inhabitant of the town, its builder and originator, claims a hand in affairs.

All this brought about an almost impossible state of affairs in Tangier. There was practically no law, each individual being nominally subject to the laws of his own country and responsible to the local Minister of his country's affairs. Surprising that little law-breaking or rioting, as we know it, took place, and it says much for the mutual forbearance of the inhabitants of Tangier of all nationalities, and there are many, that whilst minor thieving was no doubt common, murder and burglary were practically unknown. I was in Tangier in 1919 on King Alfonso's birthday, when all the Spaniards present made a fête day of it and held special celebrations, Spanish gunboats put in the harbour and the streets swarmed with Spanish soldiers and sailors. The French people held themselves practically aloof, and the Britishers took a more or less benevolent interest in the proceedings, whilst the Moors and Jews, Gibraltarians, Maltese, Portuguese, Arabs and others were mildly excited.

This year, after several "Conversations" at a meeting in Paris, an agreement was reached between the French, British and Spanish representatives which left the local jurisdiction of affairs in the hands of a committee.

Apart from the importance of Tangier to the British on political and strategical grounds, to the Spanish for like reasons, and to the French chiefly because it forms the

EXTERIOR VIEW OF THE CASBAH, TANGIER.

natural harbour terminal for the railway which is being built towards it from Fez, the northern rich capital of Morocco, and the nearest outlet for the grain and agricultural produce of the rich hinterland of Morocco, the chief predominating influences are likely to be French. Although the suzerainty is still to be nominally that of the Sultan, his Majesty is to all intents and purposes a prisoner in the hands of the French, a mere puppet who is compelled to live at his palace in Rabat, the French official headquarters in Morocco and the headquarters of that famous soldier, coloniser and maker of modern Morocco, Maréchal Lyauté.

So much for politics!

The town itself is straggling and hilly: the streets narrow and winding, as are all streets in Morocco and other sub-tropical countries where the object of "town planning" has been to defeat the sun as much as possible and leave at least one side of the street in shade for the greater portion of the day. The streets are paved with cobble stones, generally laid with a fall to a gutter of flat stones running

INTERIOR VIEW OF THE CASBAH, TANGIER.

SAINTS TOMB, TANGIER.

down the centre. Sanitation is generally conspicuous by its absence, although the French Travaux Publiques has made a few fairly successful efforts in this direction. From the Custom house or "Douane," a wide sort of promenade sweeps round the bay towards the Spanish Zone for about three miles, and a cobbled street leads inland past the Grand Mosque to a small square called the Little Socco, or Soûk. Here a great deal of the European and Moorish business of the town is conducted at open-air cafés which partly surround the square. At one end is the British Post Office and two or three French banks, and the one British bank which operates in Morocco is near by.

It is interesting to sit and watch the cosmopolitan crowd incessantly passing to and fro; here one may see Moors in their white flowing robes and jellahs or their brown gaberdine-like garments, naked-legged and shod with flat-soled heel-less flapping slippers in which they shuffle along at an amazing pace. Moorish Jews in their black clothes and skull caps—for the native Jew must wear a distinctive dress in Morocco—Sheriffian soldiers of the Sultan in their baggy red trousers and fez-shaped caps, British sailors from a destroyer, an odd British civilian inhabitant, French business men or Spanish soldiers, Algerians, Maltese, Tunisians, Greeks, Italians, and all the crowd of Levantine ragamuffins who accumulate in such towns, a crawling Moorish beggar blinded in both eyes by the savagery of some Sultan or Pacha, or perhaps armless or earless, donkey boys prodding their poor beasts with the sharpened end of a stick, a motor bus starting up for the Spanish Zone or for Rabat, partly across inhospitable country with scarce a road at all, at times infested with roving bands of Riff brigands, and then, after three hand-claps (à la Arabian Nights), comes our Spanish waiter, clad in correct if somewhat shop-soiled evening dress, to pour out a glass of the best coffee I have ever tasted.

So much for the people!

The best type of Moorish architecture is not to be found in Tangier; nevertheless there are a few buildings that call for comment, although the town has been greatly modernised of late and plate-glass windowed French stores are alongside Moorish "bacals" or shops whose floor is raised about three feet above the pavement and whose size is generally about ten feet by six feet frontage, the bulk of which seems to be occupied by the fat Moorish proprietor who squats inside patiently awaiting his customers. Always are you treated courteously, always is there no hurry. Always is the price asked four or five times what the proprietor will eventually accept. Come again to-morrow. The sun shines. Allah is good. Why worry?

Leading up town from the Little Sokko is the Rue des Singhines, the street of the jewellers, the chief business street of the town; this terminates in the larger market called the Grand Sokko. Here the country people bring their produce, the potters bring their wares, and on market days much business is done. Here, also, in the evening one may hear the tom-tom sounding and hear the Moorish story-teller thrilling his audience who sit or stand patiently around. On feast days or fast days, as at Rhamadan, this square is the centre of religious activity.

The Moor is great on processions, and on one of their religious occasions, called, I believe, the "Feast of the Bulls," a number of young bulls, highly decorated, with gilded horns, are led up into the Grand Sokko amid scenes of excitement and religious fervour, and there slaughtered whilst youths dance around in a frenzy of excitement with eyes starting from their heads and mouths frothing.

On another occasion I have seen a weird religious sect, whose name I forget, holding a type of religious ceremony when the men leap about and shout to the mad beating of tom-toms and cut their bare heads open with hatchets so that the blood runs streaming down their faces and clothes. On and on they go for hours on end till the sun sets.

The Grand Mosque of the City is not particularly impressive. The tower is a typical Moorish mosque tower, square and terminating in a parapet with the typical

TYPICAL ENTRANCE DOORWAY, TANGIER.

Moorish ornament, and surmounted by a smaller chamber with a tiled pyramidal cupola whence the muezzins issue the call to prayer.

Some of the streets are interesting in character. The whitewashed walls, with small windows, give an effect of breadth which is very charming; and with a blue sky overhead and a glorious, if at times rather hot, sun shining, Tangier streets may be forgiven their evil-smelling capacities. A typical feature is the arching over of the street from buildings on opposing sides. I think the main reason for this is to afford shelter from the sun at a hot hour of the day and not for purposes of support or buttress. For instance, I have seen at Salee—famous for the rovers of that ilk—a whole street arched over in this way at intervals of a few yards, there being no structural necessity for connection between the buildings.

Perhaps the most interesting building in Tangier is the "Casbah," a prison—now used as prison and court of justice. The three arches of the entrance are repeated in three bays forming a covered vestibule, and lead through one or two minor rooms to an inner, open-air court paved with tiles and having a small fountain in the centre faced with Fez tiles. Around this court is an arched colonnade, forming a sort of verandah to the various rooms of the building and typically Moorish in character. The ceilings are of wood, generally cedar, and they are richly carved and painted in bright colours and gilded; often they are divided into panels whose centre is in the form of a sort of dome formed by a series of cusped niches.

There are no doubt many interesting interiors of Moorish houses, but unless very specially favoured the European cannot penetrate these.

There is a little Moorish café near the Casbah from which a wonderful view of the town may be seen, and Tangier seen by moonlight from the balcony of this café is a sight never to be forgotten.

A Menace to the Small Architect.

The architect with a small private practice will very soon be swept out of existence unless he takes some steps to protect himself.

Years ago we could boast various kinds of craftsmen who were artists at their respective callings, and now they are as extinct as the dodo. Their work is done by machinery and "massed production"—at a cheaper rate, but not nearly so well. It is a similar position with regard to architects.

If anyone wants to build a house to-day he can avoid the expense of architectural services by purchasing a copy of sets of drawings that are broadcasted and printed in thousands by enterprising newspaper and other firms. The price is a few shillings, and although the house may not be exactly what is required, there is such a wide range of these designs available that approximate requirements can usually be suited.

But there is another menace to the small architect's existence. It is to be found in the builders (and their number is legion) who are always prepared to save their customers an architect's charges by having the desired drawings prepared by their own draughtsman—who is a salaried man drawing probably three or four pounds a week. The investor seldom realises that he is saving nothing really, because the amount of the architectural fees is probably charged up to him, indirectly, in the shape of extra profit for the builder. Nor does he realise that he is actually a loser, in that he is forgoing the protection of his interests afforded by the proper employment of an architect.

Some of the smaller contractors purposely advocate these "rough and ready" drawings, probably because they are incapable of understanding or working to a complete and elaborate set. And too many local authorities encourage this state of things, and will pass anybody's drawings, irrespective of architectural merit, so long as they are legible and conform to their bye-laws.

It is difficult to know exactly how to deal with these evils, and to protect those who have had a long and expensive training to enable them to practise. There is no law to prevent a builder's draughtsman, or a clerk in an auctioneer's office who has "picked up" some knowledge of plan drawing, from submitting plans to customers or to local authorities. It is still more difficult to prevent publishing firms broadcasting standard sets of drawings, or architects supplying the originals of these drawings. Yet something should be done to save the rank and file of the architectural profession from extinction.

Pressure should be brought to bear on local authorities to make it a rule that plans for new buildings or for alterations involving important structural work should only be accepted if they bear the signature, in handwriting (not lithographed), of a qualified architect.

With all due deference to the societies concerned with protection of the profession, I venture to assert that they are too "respectable," timid and conservative, in these days when one has to fight hard for one's just rights. More attention should be paid to publicity of cases (and they happen every day) where persons have been badly bitten through trying to save an architect's fees. A few test cases should be investigated, and the reports published, showing—in each case—the cost of the work (where no architect has been employed) and the margin of profit. This latter is sure to be substantial, and above a fair builder's profit, because competitive prices have not been obtained, *and the builder's plans have to be paid for*, somehow or other, by the unsuspecting customer.

The general building investment public should be made to see that it is false policy in the long run to listen to the blandishments of the builder who agrees to "run up a nice little house" and to "get out the plans without paying an architect to do them."

The case of the architect who, by disposing of sets of drawings to publishing firms, for broadcasting or piracy purposes, is harder to deal with; but surely it would be possible to appeal to such gentlemen's honour, if they have any, and, failing that, to ostracise them for taking the bread from the mouths of their fellow architects.

Architecture is one of the arts. It is a pity there is not the same cohesion and camaraderie that one finds in the dramatic profession, where the leaders of stage life join with the smaller fry in their endeavours to protect themselves. The bigger architects, with constant commissions for public buildings and other work where it is still conceded that an architect is necessary, do little to protect the rank and file of the profession, beyond perhaps a subscription to the Benevolent Fund. Such fortunate individuals should think more of the honour of the great architectural calling, and take a more active and sympathetic interest in the protection of their hard-hit brethren.

Unless interest is stimulated and action results, and that quickly, the smaller architect—with his sole asset of being trained for his profession—will be forced into the ranks of the unemployed. Lucky will he be if he is able to secure a poorly paid salaried berth in a builder's drawing office, and if he does this he will be still further increasing the abuses dealt with above.

CHARLES H. CRAIK.

The London County Council at its meeting on July 29, decided that its architect, Mr. G. Topham Forrest, should visit America in the early autumn of this year in connection with the suggested amendment of the London Building Acts and the revision of the Regulations with respect to the Construction of Buildings wholly or partially of Reinforced Concrete. The Building Acts Committee expressed the opinion that in the public interest the Council should have the most up-to-date information and advice upon modern methods of construction, particularly in regard to buildings of reinforced concrete and steel framed construction, and they therefore considered that the architect should visit America to investigate and report upon the subject.

Apartment Housing in the United States.

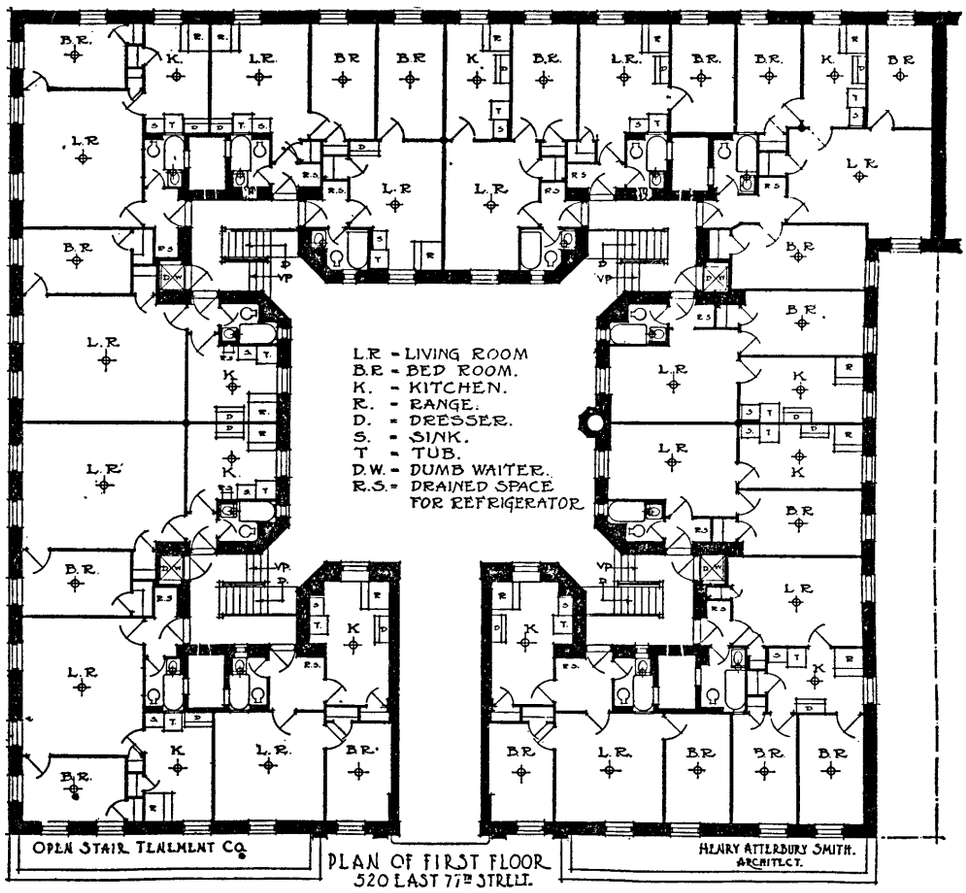
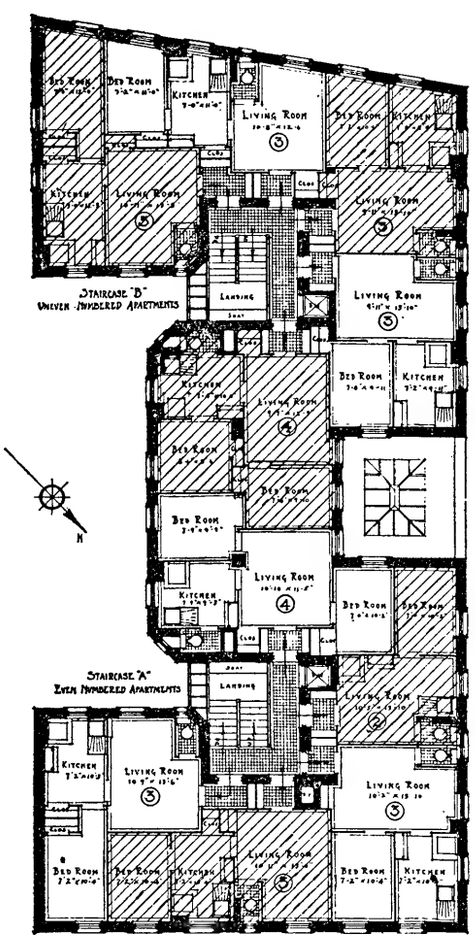


Figure 13

TYPICAL FLOOR PLAN OF OPEN-STAIR TENEMENT TYPE, 520 EAST SEVENTY-SEVENTH STREET, NEW YORK CITY. HENRY ATTERBURY SMITH, Architect.



MODEL OPEN-STAIR FIREPROOF TENEMENT, 746 11th AVENUE, NEW YORK CITY. W. EMERSON, Architect.

The " Architectural Record " of New York has given a series of very clear and convincing articles on the " Low Rental Apartment," which the writer, Mr. Frank Chouteau Brown, describes as being an economic fallacy. It is true that the Metropolitan Life Insurance Society have recently succeeded in building low rental apartment houses, but this was only made possible by its possessing large cash reserves, coupled with the " tax exemption law," which has so much encouraged American building. A favourable result would otherwise have been impossible. As it is, the company calculates to obtain a 6 per cent. return with a possible 2 per cent. to 3 per cent. for amor ization.

The author considers that recent legislation intended to raise the standard of housing has in reality intensified evils. The drastic reforms insisted on increased cost and, coupled with the greatly increased cost of building, prevented building, which it was impossible to carry on at a profit. In addition, the increased cost of repairs to existing tenements has brought about increases of rent, while the demand has greatly increased. There has been a tendency to make use of better class dwellings which have been abandoned by their occupants, but such accommodation has proved very difficult to adopt, the sitting rooms being too large and the bedrooms too few in number, while sanitary fittings are in excess of those required.

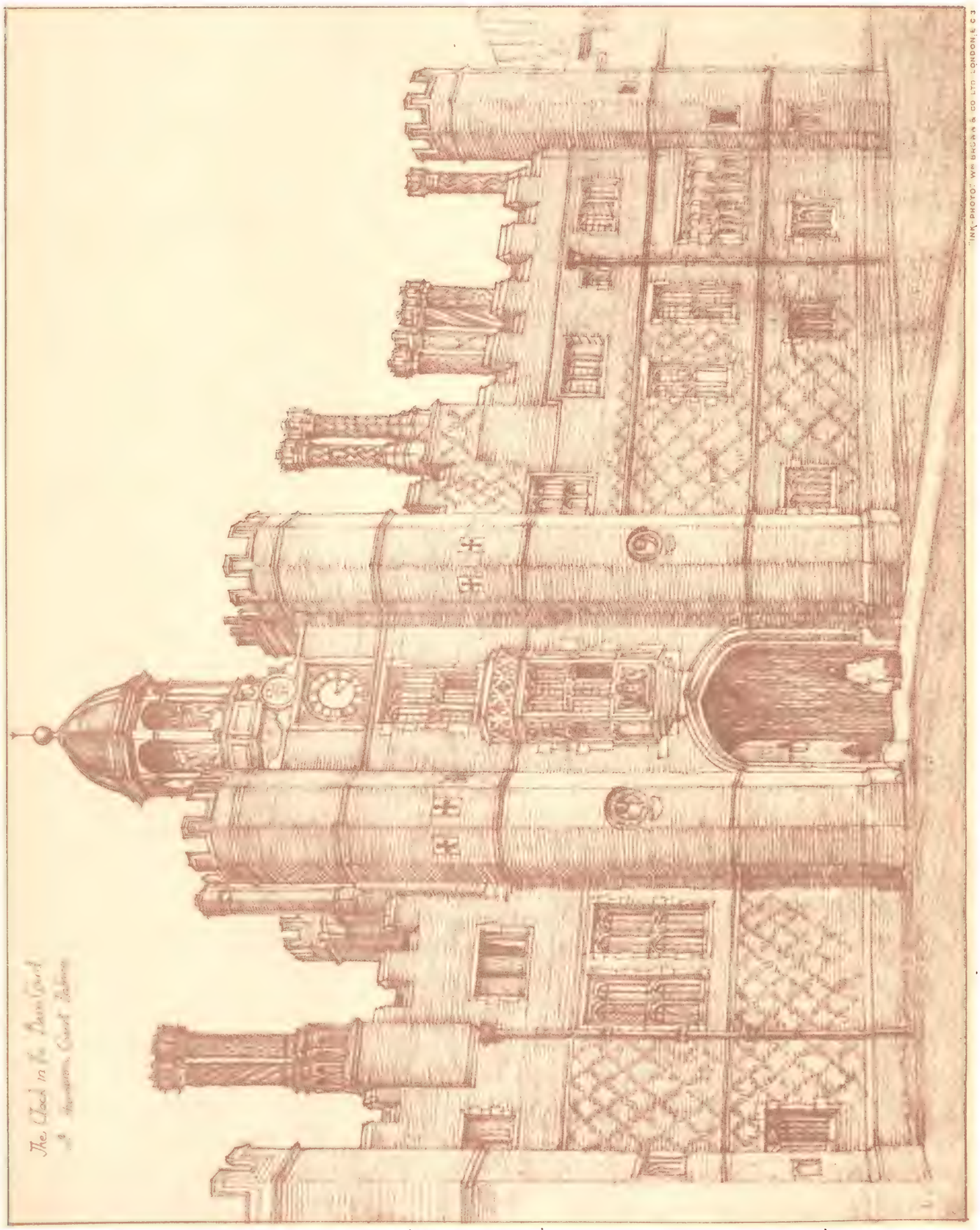
It is more profitable for the owners of such buildings to use them as they are than to attempt to alter or rebuild them to suit altered conditions, as by so doing they come under the stringent provisions of the Tenement House Law. The writer's conclusion is that nothing can be done to remedy matters until legislation is passed to modify the stringency of measures which have been enacted with philanthropic intent, a conclusion which we in England may also say obtains here.

Some of the plans accompanying the articles are admirable in their simplicity and efficiency of arrangement, and from these we give one in East Seventy-Seventh Street, New York, by Mr. Henry Atterbury Smith. Open staircases

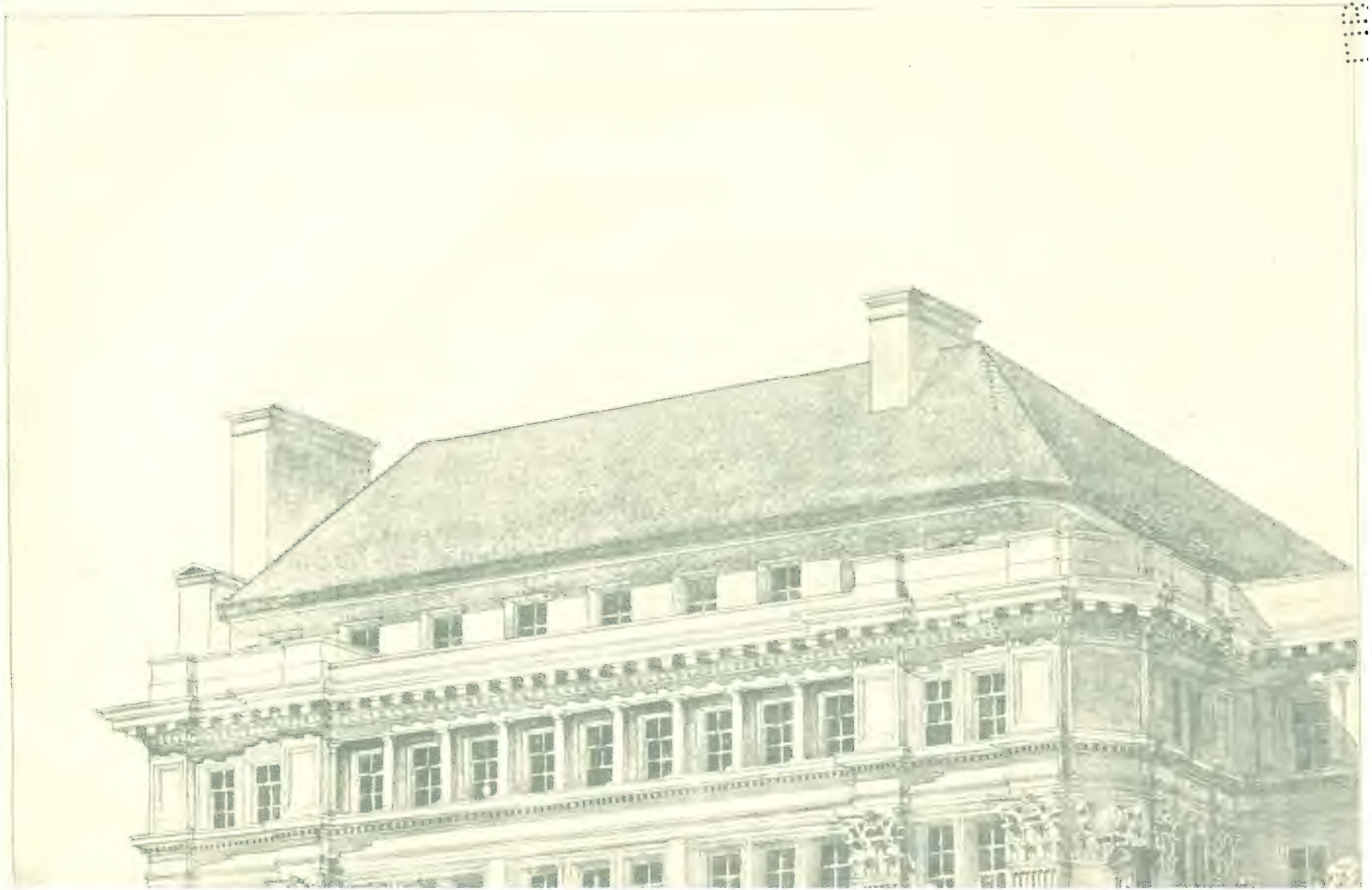
R A. EXHIBITION.

EAST END. ST. MARGARET'S CHURCH, PUTNEY.

H. P. BURKE DOWNING, F.S.A., F.R.I.B.A., ARCHITECT.



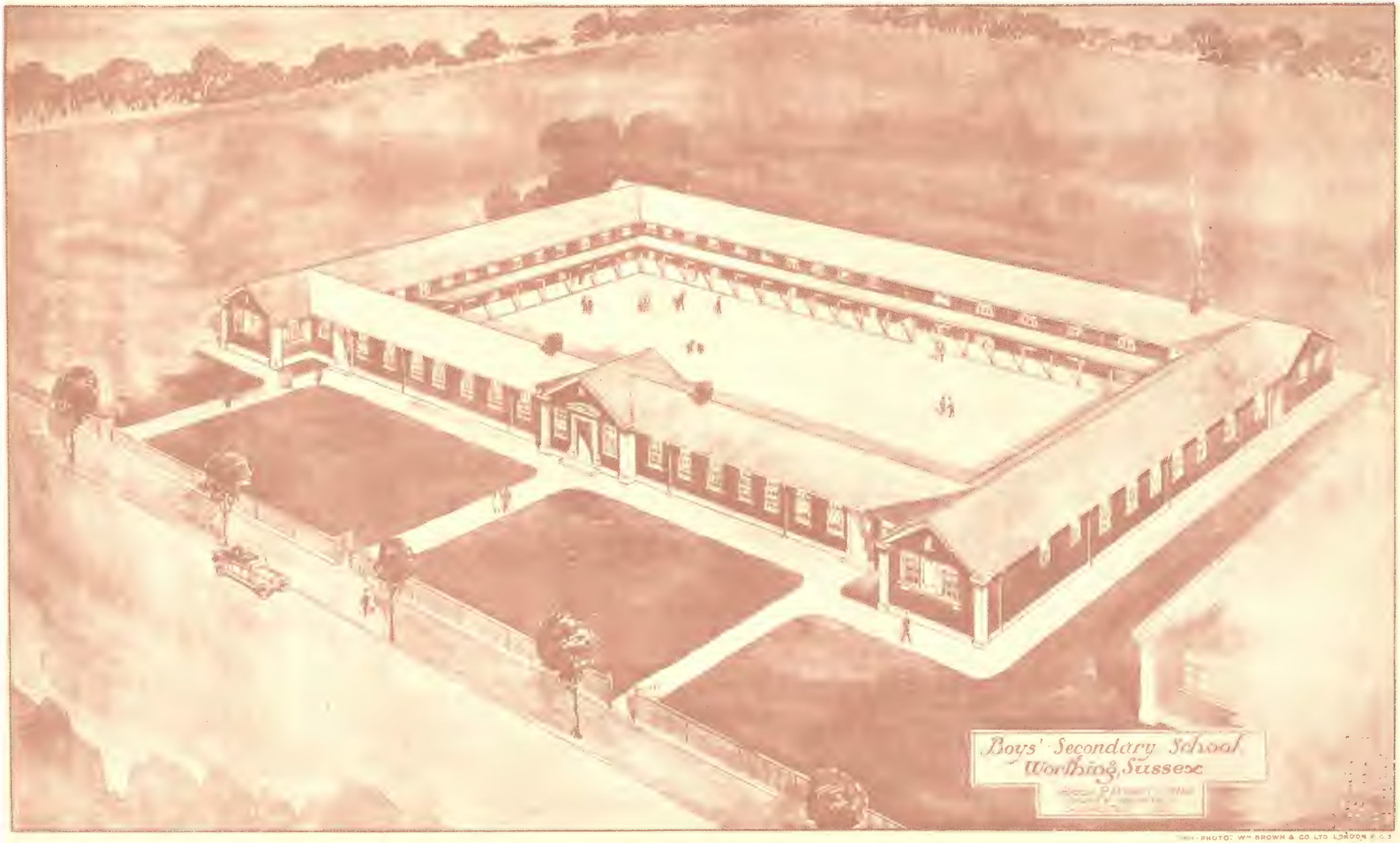
CLOCK IN THE BASE COURT, HAMPTON COURT PALACE.



INK-PHOTO WM BROWN & CO. LTD. LONDON E.C.

REBUILDING OF 36-44 MOORGATE. FOR THE OCEAN ACCIDENT & GUARANTEE CORPORATION. LTD.

SIR ASTON WEBB. P.R.A. AND MAURICE E. WEBB. ARCHITECTS.



BOYS' SECONDARY SCHOOL, WORTHING, SUSSEX.

HAYDN R. ROBERTS, ARCHITECT.

placed in the angles of this and other plans are commended as giving unusually good facilities for access to several blocks, while presenting advantages of thorough ventilation. The recessed position of the stairs also gives good protection from the weather. Another block in Eleventh Avenue, New York, of which Mr. William Emerson was architect, shows even greater economy in its staircase arrangement. As to cost, this last building was erected in 1917 at a rate of about 1s. a foot. In 1921, an identical block on an adjoining site was estimated to cost 2s. 2d. a foot, and in 1922 to 2s. a foot. The monthly rentals charged are, £7 for 4 rooms, £6 for 3 rooms, and £5 for 2 rooms, which are stated as being reasonable and low rentals for well-constructed apartment buildings in New York. The writer calls attention to the necessity of revising building laws in recognition of the increased security given by fireproof construction with the object of cutting down the cost of building, a reform which is certainly badly required in London.

The Future of Manhattan.

From the "Architectural Record" of New York.

When evils become intolerable, they have a way of righting themselves. Thus congestion of population and of traffic on Manhattan Island are proving to be blessings in disguise.

The greatest obstacle to urban amenity in America a decade ago was each citizen's constitutional right, as Horace McFarland once phrased it, to be a hog three hundred and sixty-five days in the year. It had been believed that the fourth amendment would prevent any such exercise of centralised power as would be necessary to bring about order and harmony. Then the crowding of clothing factories into lower Fifth Avenue, packing the sidewalks at noon, proved to be the last straw. A zoning law, restricting the use, as well as the height, of buildings in various districts could at last be passed in New York; and, once passed, could be upheld by the courts as an exercise of the police power, for the protection of public safety and health. Other states where conditions were not yet so bad, and could never have instigated these invasions of American "freedom," could follow suit. Now, when various beneficent effects can be observed, a hundred new applications and extensions are in progress.

With protection from the invasion of factories and business has come the possibility of reclaiming whole districts once blighted or threatened with blight. It has permitted the development of Park Avenue, itself made possible by electrification of the railroad; it has presided over the renaissance of Greenwich and Chelsea, and the brilliant reclamation proceeding eastward from the Park to the River. These things are cumulative. Instructed by the enormous economic gains in Park Avenue, the property owners of Sixth Avenue are about to pay for replacing their elevated road by a subway. Who can doubt that the upper Third Avenue elevated will ultimately follow it? The ineradicable belief of the commuter that the elevateds are slower dooms the others, soon or late.

With each new river bridge or tunnel comes a new exodus of the poorer dwellers on Manhattan. While we have been admiring model tenements abroad we have ourselves been making an equal contribution to the housing problem by American rapid transit. Only the poorest now cannot afford the daily dime. With ground rents still rising they may soon be pushed off the island. And when the urban factories once realise that it will be cheaper to move out after them than to raise their wages, then decentralisation may begin to become an accomplished fact.

Traffic conditions seem about to bestow various other civic boons. The greater speed of cars where there are no cross streets is suggesting two great marginal ways, elevated along the docks. New York will have its quais and see its river yet.

One sees how little it may take to guide the operation of material and economic forces so that they may work for good and not for evil. It is a realisation by its leaders of this opportunity which makes the greatest asset of the Sage Foundation organisation for the Plan of New York. It is not vain to hope that in our lifetime we may see Manhattan purge itself of sordidness and squalor, and be glorified as a citadel of the metropolis, retaining only what is strongest and best.

FISKE KIMBALL.

The Smoke Nuisance.

Trail of the Domestic Chimney.

BY COLONEL SIR ARTHUR HOLBROOK, K.B.E.

Among the thousand and one lessons which the wonders of Wembley are driving home to the plain, practical bosoms of the world and his wife is the gross misuse of coal and the evils that result. It is peculiarly fitting that in this seat of Empire there should be an exhibit illustrating the life, health and property destroying power of smoke, for although it is the centre of an Empire on which the sun never sets, in London itself during the winter the sun is rarely seen to rise.

The chief reason for this is that the air is artificially thickened by the products of imperfectly consumed coal. London, in common with many other populous centres in Great Britain, deliberately deprives itself of light, cleanliness, and cheerfulness by using coal in the wrong way.

And so, in order to demonstrate to the public the need for scavenging the sky, the whole gas industry of Great Britain has wisely included in its instructive and interesting display a section which presents, in a very effective manner, a striking illustration of what cities can enjoy or must suffer according to whether coal is used or abused in providing light, heat, and power for the service of the inhabitants.

In the centre of the section stands a huge block of coal, draped in black, fittingly to indicate the result to the community of burning soft coal. A smoke-fog, we know, sends up the death rate besides engendering what are known as diseases of darkness.

There can be seen in this section some of the appalling results of these city fogs, their effect on buildings, clothes, foliage, health.

There is not only waste of health and wealth, but also waste of fuel and waste of power. From an economic point of view, therefore, coal smoke, when avoidable, is indefensible.

The United Kingdom burns on an average 40½ million tons of coal for domestic purposes. This quantity throws into the air nearly 2½ million tons of sulphurous soot. Thus are the tar, oils, sulphate of ammonia, gas, and other by-products of coal sacrificed, and thus is the whole community inflicted with disease and destruction.

St. Paul's Cathedral, Westminster Abbey, the House of Commons and all our historic buildings are being defaced by fogs. It is estimated, for instance, that a single bad smoke-fog costs the Metropolis over a million of money. No less than 200,000 tons of sulphur are poured over London from coal fires each year.

The extra cost of washing, the injury to clothing and fabrics of every kind, the depreciation in the value of house property, of works of art, and of everything that comes beneath the fretting influence of sulphurous acids—these are merely indicative of the dire results which accompany the smoke nuisance.

All these things are illustrated by means of pictures, diagrams, and specimens at the Gas Exhibit, and the display is so arranged and labelled that visitors can read the lesson for themselves, and that is to set their chimneys in order.

Yes, the chimneys are at the root of the evil, and the fogs of England are a byword among the nations. What is wanted is a Blue Sky Bill for England, for a scavenged sky means a smokeless sky, and a smokeless sky means a sunlit sky and happier and healthier people.

The will has been proved of the late Mr. William Edward Willink, F.R.I.B.A., J.P., of Bern Hey, Livingstone Drive, and Cunard Buildings, Liverpool, at £12,281.

The Chatham and Rochester Joint Sewerage Board and the Chatham and Rochester Corporations are making active preparations to start their scheme of main drainage. The whole scheme for the joint and separate internal sewers of both Corporations was designed by W. H. Radford & Son, of Nottingham, and passed the Ministry of Health in 1916. The Joint Board and the Chatham Corporation have now instructed this firm to carry out the Joint and the Chatham internal work, the present estimate for which is £400,000. It is understood that work will be commenced in two months time and contracts advertised shortly.

Architectural Education in the Present in England.

By W. Curtis Green, A.R.A., F.R.I.B.A.

We heard recently from Mr. Waterhouse and other speakers of architectural education of the past; the discussion was designed to pave the way for the investigation of the present, in order that we may to-morrow prepare for better things in the future.

The present is a time of extraordinary interest and of development in architectural education; forces are at work, which, as the younger men come into their own, will profoundly affect our thought and achievement. I do not wish to be misunderstood; I do not predict super-architects. It is impossible to conceive higher ideals than those that have been borne aloft by our forbears, or than those held by the leaders that we are proud to follow to-day. I do not anticipate greater achievement than theirs. What I foresee is that for which the professors and masters in the Schools are working, fostered and helped by the Board of Architectural Education—namely, the raising of the general standard and general understanding of architecture.

For 60 years there has been an examination for the Associateship of the Institute, and for 42 years that examination has been compulsory. For 20 years the Board, established by men whose names are honoured in this country, has been in charge of the system. We are to-day in a transition stage; many students following the old road as articled pupils, getting such school training as may be available outside their office hours. There is no control over the quality or numbers that enter the profession in this way. We have at present no means of guiding their work other than by the examination system.

These students and the examinations to which they submit themselves are one of the concerns of the Board; the examinations themselves are the subject of constant supervision and improvement; the impossibility of dealing adequately with architecture by examination is fully recognised. Any stereotyped system tends to mediocrity and encourages cramming; the use of books in wrong ways, and in the early impressionable years, creates a scale of wrong values in the mind of the student.

Such virtue as remains in the apprenticeship system lies with the master, aided by outside classes. Unfortunately, the rush of modern practice makes the personal supervision of the principal practically impossible, or very rare. An apprentice is left to pick up what he can from the assistants in the office. He may see a great many fine working drawings made, and learn the routine of an office. He may see very little of specifications and kindred matters. He sees the results of his master's talent and experience, but learns little or nothing of the principles or theory that have gone to the making of them. He becomes the follower and carries on the tradition of a man and his work rather than of architecture in the wider sense.

A new factor in the situation is the School of Architecture either attached to a university, a school of art, or independent of either.

There are at the present time seven such schools having a full five years' course of study, the later years combining some office training; the completion of the course to the satisfaction of the school authorities and of the Institute, who are represented by two external examiners, together with the passing of an examination in Professional Practice, gives the student exemption from the Institute examinations, and he becomes an Associate of the Institute. There are sixteen schools with exemption from the Institute intermediate examination. The number of students recently in the schools were:—First year, 189; second year, 217; third year, 131; fourth year, 99; fifth year, 50—a total of 686. These schools are situated at the great centres of population and are gradually covering not only the British Isles but the Dominions overseas. They are new, and they are young. They show the qualities of their condition, but they have, I believe, come to stay. One of the earliest pioneers of the schools, Professor Reilly, who has devoted the best years of his life to the founding and building up of the school system in general and the Liverpool School in particular, is of the opinion that it is a little early to pull them up by the roots to see how they are growing, or to expect much fruit from them; I agree that the tree must be allowed time to establish its roots, but the fruit is not by any means negligible. It may be seen, for instance, in some students who have in recent years returned from the British School at Rome. The winners of this blue ribbon have without exception been products of the schools. It may be seen, too, in the results of recent competitions, notably in that for the Holt building at Liverpool. I speak for myself, and I believe for the Board, in expressing the profoundest belief in these schools and in their future.

The differences between the schools is a notable and valuable fact. We must have some standard of achievement, but it is not desirable that the system should be standardised. We want the teachers of the schools to visit other schools and learn what they can from them. Differences of thought, of ideals, of methods, are as marked in the schools as they are outside them; it is by what has been achieved and not by what has been said that posterity will ultimately value what is now being done.

There are architects who object to the schools: some because they do not understand what they are doing and object to a jargon which has unfortunately been adopted in some few schools when the use of the King's English would have aroused no feeling; others, and these must receive serious consideration, because they regard the schools as too bookish and too theoretic; a few because the old system of apprenticeship was a pleasant source of income and comfort, and because they do not turn out immediately useful assistants. There was a time when young men left the schools with an exaggerated view of their attainments and value. They obtained a good salary and were found useless for the work for which they were paid. That, I believe, is becoming a thing of the past. A boy entering an office for the first time, unless he is engaged on the preparation of competitive drawings, realises that he is a new boy making a new beginning, his first duty being to get his master's ideas into material shape through the medium of the drawing board, a duty requiring accuracy and patience. On the other hand, the principal is finding that at the end of a year or six months such an assistant is more useful and has a greater grasp of the content and meaning of architecture than has the office-trained man.

An American writer has well said that education does not necessarily teach how to do a thing, but how to make us capable of doing it. In the education of an architect the question is: Are we awakening enough enthusiasm to carry the man through the drudgery to power and to freedom?

In the early impressionable years of a boy's training and development there is, in my mind, no question of where the balance of advantage lies. In the one case he enters an office where he can take no useful part, nor is he capable of understanding the activities or interests of his fellows.

In the other he enters a great school perhaps with 10, 20, 30 or 40 other freshmen. He is set to work with them in an ordered sequence of study, with a mind unconfused by factors and values relevant only to the practising architect's office. He has the healthy competition of students of the same year. The elements of draughtsmanship, design, construction, and history follow in an orderly procession, properly correlated and developed so that he may seize on their meaning and purpose. The strength of the schools lies chiefly in the method of teaching; in the personnel of the staff, who are mostly young and enthusiastic men, all of whom are actively engaged in private practice; and in the fellowship of the students of the same and of the senior years.

The school system at its best, as I have personally seen it at the A.A. at Liverpool, at Manchester, at Bristol, and I hope and believe at many other schools which I have not yet had an opportunity of seeing, is the teaching of architectural design and construction concurrently in stages from the first year to an honours course in the fifth year. It is interesting to note that at Liverpool, where there is an honours course for fifth-year students that can be taken in either design or construction, those who take it in construction produce the best designs.

The method of teaching design has as its origin the great French school. The method adopted is that of M. Guadet, whose elements and theory of design and composition have been applied with so much success to the great school of modern architecture in the United States of America. It is noticeable that those schools which produce the best results are just those which encourage by lecture and by quick rough small scale sketches the study of design from the first year to the last. Every fortnight a programme is issued for some subject, large or small; the larger the subject the less the detail required; the first sketch is criticised. A number of such studies teach the student the right approach to a problem in design, to read the programme, to seize on the essential factors and to arrange them harmoniously. It is only in the last years that a student works out in detail a design for a building of any size.

Here are to be seen few if any finished designs having initial and fundamental mistakes such as are so often seen in competition work. The students are taught the grammar of the art that they are going to follow, so that they may hope to achieve that harmony of form running throughout each composition, both in plan, section and elevation, that alone entitles the result to the name of architecture. I must say a word about the designs submitted for the Prix de Rome by students during

their fourth or fifth year in the School. These designs are the students' unaided efforts. They are not very good, and they are severely criticised. Could you or I have done so well during the fourth of fifth year we were in an office? The standard must be raised by encouraging men of more experience to enter for these valuable prizes.

You can trace at the exhibition a student working his way towards freedom of expression. The schools, quite rightly, I think, take up what may be described as a central position. They regard the classics as the gold standard. The student is taught to look to these, Classical or Gothic, as the forms of utmost perfection. They are shown to be the forms to which we all constantly return, and which, on returning, we always find more perfect than we thought for. While he is being taught to delineate these forms he is being taught their application and the methods by which they were built. At the same time he is being lectured to upon the sources of art, and taught to realise the richness of his heritage and his responsibilities as a follower of that art to the life of his own day.

Some of the schools perhaps do not insist enough upon direct contact with the noble forms they hold up to the student, because the school is not in a favourable position to do so. Like the schools in America, they have to fall back to a great extent upon books. I believe the professors of architecture hold the view that the elements of architecture can best be studied from actual buildings, and that composition can best be studied from books; the observation of the one teaching the relation of those parts that the eye can embrace, and of the other the beauties of composition in plan, section and elevation focussed into plates.

Sir Reginald Blomfield in one of his lectures to R.A. students said: "The reading of books will not make architects; his proper study will always be buildings." I do not myself believe that there is any short cut in this matter: the study must be from buildings, and their beauty gradually unfolded to the student by his making his own measured plans, sections and elevations.

Town Planning Institute Conference at Leeds.

The sixth annual country meeting will be held at Leeds from October 10 to 12, 1924, inclusive. The meeting will open on Friday, October 10, and members will travel down on Thursday evening, October 9. The following items of the programme are already arranged: The Leeds City Council have most kindly invited the Institute to hold its meeting on Friday morning at the town hall. Our President, Mr. W. T. Lancashire, M.Inst.C.E., the City Engineer, will describe the town planning proposals of the city of Leeds, and Mr. R. H. Mattocks (Member), Chief Surveyor to the Leeds and Bradford Region Joint Town Planning Committee, will give an account of the work of that committee. On Friday evening the Lord Mayor will hold a reception at the Art Gallery, Leeds. Visits will be paid to the town planning areas, the ring road, new main arterial roads, and to Templenewsam and some of the parks. A detailed programme will be issued in due course.

Hotel accommodation can be arranged at the Queen's Hotel, if early application is made to the Secretary on a special form. Delegates will pay their own hotel bills.

The meeting is not confined to men or members of the Institute only—friends are invited. Alfred R. Potter, Secretary, 11, Arundel Street, Strand, W.C.2.

The Architectural Association, School of Architecture. Scholarships and Prizes, 1924.

Public School Entrance Scholarship, value £63, J. A. Ritchie (Charterhouse). Open Entrance Scholarship, value £63, D. R. Burles, Municipal School of Arts and Crafts, Southend-on-Sea. Architectural Association Essay Prize, open to all students, value £10 10s., R. F. Orfeur. First Year Course: 1st Prize, "Howard Colls" Travelling Studentship, value £15 15s. H. H. Goldsmith. Second Year Course: 1st Prize, Architectural Association Travelling Studentship, value £26 5s., J. Breakwell. Scholarship tenable for one year in Third Year Course, value £63, C. W. Sully. Third Year Course: Holloway Scholarship, tenable for two years, value £300, D. H. Beaty-Pownall; 1st prize, "Henry Florence Travelling Studentship," value £50, R. C. Erith. Architectural Association Diploma, on satisfactory completion of five years' school course and a period of six months' office experience, T. S. Barnes, R. E. Enthoven, L. R. Hiscock, J. K. Parker, W. Percik, G. W. Silk, Miss E. Scott, Miss J. E. Townsend. The following students have qualified for the diploma subject to completion of six months' office experience, H. Braddock, G. G. Grant, Miss A. F. Jones, Miss E. Meikle, Miss E. Moseley, D. F. Martin Smith, H. A. Pakington. Medal presented annually by the Société des Architectes Diplômés par le Gouvernement to the best Diploma student of the year, R. E. Enthoven. R.I.B.A. "Henry Jarvis" Scholarship, value £50, J. W. Wood. Architectural Association Measured Drawing Prize, for the best set of measured drawings submitted in the school, value £10 10s., H. H. Goldsmith.

Book Notes.

A collection of designs by students of the Association School is published by Messrs. Ernest Benn, Ltd., at 21s. net. The book is prefaced by introductory essays by Robert Atkinson, Howard Robertson, Oscar Faber, V. O. Rees, Walter M. Keesey and L. H. Bucknell. The book will no doubt be useful to those who are thinking of entering the School, and interesting to those who are attending its classes, but otherwise they chiefly serve to give us some means of judging whether the present system is on right lines. We are inclined to doubt it, as we believe many of the subjects set are unnecessarily remote from practical conditions, and we are convinced that the student of to-day neglects the very important exercises of measuring and sketching in favour of making a larger number of original designs. We believe the student would do better work in the future were he persuaded to devote more time to becoming better acquainted with the work of the past by means other than the easy medium of books.

"Structures and Sketches." Erich Mendelsohn. Ernest Benn, Ltd. 21s. net. This book is printed in Germany by Ernest Wasmuth, Ltd., Berlin, and whilst many very fine books have been produced in that country in the past, we are at a loss to understand upon what basis the producers and publishers founded their hopes that the work of Erich Mendelsohn would find an appreciative public in this country. Architects as we know them have a very keen sense of the value of money. And all books of reference must give a full measure of value before the professional in any stage of his life will part with twenty-one shillings. To pass scathing remarks and comments on the work of the Futurist is very cheap and futile. Many of their efforts have undoubtedly benefited the whole thinking world. The majority sink peacefully into the contented rut of life. Futurism has lifted quite a number of very able artists out of these ruts and has inspired them with new life and vigour which has resulted in a broader and wider outlook. But we greatly fear that the publishers of the English translation of Erich Mendelsohn's book will find that the sketches which are intended as food for architectural inspiration are altogether too vague and childish. On page 12 a sketch purporting to illustrate a "Factory with Crane" would in truth without its title be difficult to understand. With this assistance a great deal is still left to the imagination. On the same page a theatre and two observatories are indicated by sketches. The charitable mind will seek with the aid of the titles to follow the idea these scribblings are intended to convey, but beyond the recognition of the details characteristic to such buildings, we cannot think that these sketches will inspire or promote any useful schemes.

We note that these sketches are dated 1917. Possibly Mr. Mendelsohn was somewhat affected by the general turmoil of events at that time. A sketch for a railway station, drawn in 1915, would appear to us to better illustrate the sinking hopes of a national undertaking; and the sketch for a motor body works drawn at the same time might very well illustrate some structure reduced to a scrap heap by the terrors of modern warfare.

The designer has undoubtedly been influenced by the national characteristic love for heavy masses and terrible fearsome-looking forms. An optical factory illustrated might be some war machine of great power, and though the great war is over there is every evidence in many of Mr. Mendelsohn's sketches which would supply sufficient proof to a thinking mind that the love of heavy, massive, fearsome things still dominates the national soul.

Such suggestions are not appreciated here. Architectural beauty is not expressed by heavy cumbersome forms. Our buildings are not constructed with any thought that some day they might be easily converted into fortresses and positions upon which the mounting of heavy artillery would be a matter of great simplicity.

The Manual Instruction Department at Airdrie Academy Secondary School is to be extended at a cost of £5,700.

A new institute is to be erected by the Carnegie trustees at Rosyth.

The Hackney Borough Council have passed the plans for the erection of a new Wesleyan Central Hall in Mare Street.

General News.

AXWELL PARK.—Durham County Council are purchasing land at a cost of £1,400 in order to proceed with the erection of the new Axwell Park bridge from the Chavering Estate.

BEXHILL.—The town council have a scheme to extend Terminus Avenue in order to link up with a new road from the Cooden estate.—A subway is to be constructed in Terminus Road at a cost of £2,628.—Negotiations are taking place regarding the Manor Bridge, the railway company having estimated the cost of a four-way bridge in ferro-concrete at £7,500 and a smaller bridge at £6,500.—Six houses are to be erected by the Council at Little Common.—Plans passed: 11 houses in Plemont Road and three elsewhere for Mr. J. E. Maynard.—Land in London Road is to be allocated for the erection of centres for the Education Committee.—A report has been prepared by Mr. G. Midgley Taylor on the general question of sewerage as affecting the whole of the borough.

BIRMINGHAM.—The Corporation are recommended to purchase, at a cost of £116,000, the Quadrant Buildings at the corner of High Street, New Street and Worcester Street, for a street improvement.—The governors of the General Hospital have asked their architect to prepare plans for an extension for at least 130 beds. Feeling that it is inadmissable to remove the institution from the centre of the city, the governors have prepared the scheme for extensions, which will involve the acquisition of a site of St. Mary's Church. The governors will provide a site and build a new church at a cost of £16,000. The Housing Committee of the Corporation are supporting the proposals of the governors.—The Corporation is recommended not to purchase Heathfield Hall, which has been offered at £10,000.—The following relief works are suggested: Completion of Nechell's generating station, £134,000; construction of embankment at the railway for a proposed generating station at Harris Hill, £20,350; construction of new reservoir at Frankley, £500,000; refreshment rooms, etc., in parks, £14,000.—A school for 400 is to be erected at Billesley at a cost of £14,566.—A sum of £1,755 is to be spent on alterations at the Moseley Secondary School.—Extension and improvements are proposed at the Little Bromwich Hospital at a total cost of £108,460, including a new nurses' home, for which plans have been prepared by Messrs. Dallas & Lloyd.—The erection of a public washhouse is recommended when a suitable site can be secured.

BIRTLEY.—Part of the hospital at Elizabethville is to be converted into a school for 300 scholars, the cost being estimated at £1,600.

BLAYDON.—The Urban District Council propose to erect 20 houses at Blaydon and 24 at Chopwell, and intends, as soon as it is possible to do so, to build 300 on the Bleach Green Estate.

BRADFORD.—Sanction has been given by the Town Planning Committee for the development of estates by the Heaton Estates Co. of the Smith Avenue, by Mr. E. Hillam, at Speeton Avenue, and by Mr. B. Wilman of Toftshaw, Moor-Side.—The City Architect has reported that the cost of increasing accommodation at the Midland Road School will be £2,570.—The Architect has been asked to prepare sketch plans on new lines for a secondary school at Bolling Hall.—Additional accommodation for mental defectives is to be provided at the Westwood Estate.—The Health Minister has sanctioned a loan of £210,496 for the erection of 506 concrete houses at the Brierley House Estate.—The tender of Messrs. Peter Lind & Co., £3,700, has been accepted for a ferro-concrete bridge for carrying syphon pipes across the Aire Valley at Esholt.

BRIGHTON.—The Housing Committee propose the erection of four blocks, three storeys high, with four flats on each floor, a total of 48 flats, on the Loder Street site, at a cost of £25,440.—It is suggested that the remainder of the Moulsecoomb Estate shall be acquired at a cost of £27,500, with a view to utilisation for present and future municipal purposes.—An expenditure of £20,000 is recommended to level and prepare the playing fields at Varndean.—Plans passed, four houses, Hollinbury Road, for Mr. E. Birch; six houses, Roedale Road, for Mr. W. J. Burslow; fourteen houses, Hollingdean Terrace, for Mr. W. J. Burslow; nineteen houses, Dudley Road, for Mr. H. Belch.

BRISTOL.—The City Council are being asked to rebuild the workhouse at Weer.—The Council now propose to acquire Southey House and the Star Tavern for £1,500, in order that the whole of the College Green site may be available for the proposed municipal buildings.

CHESTERFIELD.—Mr. P. B. Houflon, the Council architect, is to obtain tenders for the equipment and enlargement of the new Whittington School.—A school is to be erected on the Boythorpe Estate.—The Corporation are purchasing from the Duke of Devonshire land adjoining the racecourse for a recreation ground.—An expenditure of £80,000 is proposed for sewers and sewage disposal.—Plans passed: Extensions, bank premises in High Street for Westminster Bank; rebuilding the Alma Inn, Derby Road, for Brampton Brewery Co., Ltd.; five cottages, Derby Road, for Brampton Brewery Co., Ltd.—The Borough Surveyor has prepared a lay-out for 26 houses at Boythorpe.—The tender, £23,275, of Messrs. Swift Bros. and Haslam Ltd., has been accepted for the erection of 26 A3 type and 24 B3 type houses at Highfield Lane.—An additional expenditure of £70 per house has been voted to provide concrete foundations for five houses on filled-in land.—A scheme has been prepared for rehousing 85 tenants who will be displaced by the improvement scheme.

CROYDON.—The Governors of the Whitgift Foundation propose the erection of a new Middle School to provide in the first instance accommodation for 500 boys, and to allow for ultimate extension to accommodate a further 100 scholars.—Plans passed: Six houses, Mersham Road, for Mr. G. A. Wall; alterations to Sheldon Arms, Sheldon Street, and Clifton Arms in Clifton Road for Mr. E. A. Jackson; four houses, Lodge Road, for Mr. H. St. John; seven houses, Gonville Road, for Mr. L. White; 66 houses, Croindene Road, Upwood Road, and Lloyd Avenue, for Mr. S. H. Laver; three houses, Colliers Water Lane, for Mr. P. Richardson; seven houses, Buller Road, for Messrs. Scratchley Bros.; four shops and flats, Brighton Road, for Messrs. Chart, Son and Reading; 24 houses, the Chase, Norbury, for Messrs. Young and Mackintosh; 14 shops and living rooms over, Green Lane, Norbury, for Mr. W. G. Ingram; four houses and shops, London Road, for Mr. W. P. Mellor.

FISHBURN.—A school for 240 is to be provided, the cost being estimated by the Durham Education Committee at £6,722.

ILFORD.—A section of the Loxford Hall estate is to be developed. Plans passed: Sunday school, The Drive, for Messrs. Gunton & Gunton; 20 houses, Meads Lane, for Mr. Leonard Randall; extension, All Saints' Parish Hall, for Messrs. Cuepin & Bowers, eight bungalows, Longbridge Road, for Mr. W. S. Wilson, three houses, Wellesley Road, for Mr. J. Robinson; four shops and houses, Green Lane, for Mr. E. Meredith; parcels office, Ilford Hill, for L. & N.E.R. The L.C.C. are giving 33 acres for the extension of Goodwaynes Park.

KENSINGTON.—The Borough Council approve of plans for a building on the site of Nos. 15 and 16, Leonard Place, and a motor generating station, works and offices on a site in Pelham Street: and five houses in Aubrey Walk.—The Everlasting Tile Co. have asked for a lease of 1·4 acres at the Council's Wood Lane depôt in connection with the manufacture of clinker, brick, and concrete products. They would erect a brick and tile factory, brick and tile steam chambers, office and store and porter house. The Council's Committee, however, cannot recommend leasing the site.—The Council have asked Mr. J. B. Gridley, architect, to prepare specifications and obtain tenders for the conversion of Nos. 34 and 36 Bosworth Road into flats.—Mr. L. R. Guthrie, an architect, who has reconstructed houses in the borough, has been asked to prepare plans and obtain tenders for the conversion of Nos. 50, 52, 54 and 56 Sirdar Road into flats.—The Baths Committee recommend the tender, £705, of Messrs. G. N. Watts, Ltd., for adaptation work in connection with the conversion of the women's bath into a public hall, including the provision of maple flooring.—The Housing Committee propose the erection of 40 tenements on the fourth section of the St. Quintin Estate.—The Council are negotiating regarding the widening of Kensington High Street, which will involve the setting back of Messrs. Barker's premises on the south side of that thoroughfare. The Council have had an assurance that if arrangements are made whereby Clarence Mews, Burden Mews, and Ball Street are closed to the public, and the site incorporated with the adjoining buildings of Messrs. Barker's, no claim will be made for land surrendered for the widening, the matter of compensation being confined to rebuilding and disturbance.

LEAMSIDE.—A new school for 500 is proposed at an estimated cost of £9,494.

NEWCASTLE.—The Library Committee recommend the City Council to erect a branch library at Scotswood.

PLYMOUTH.—The architects have prepared final plans for the new public school. The Committee have accepted the tender of the Limmer and Trinidad Lake Asphalt Co., £300, and relaying the flat roof of the Keppel Place central school. The Borough Surveyor has prepared plans for a new slipway at Tamar Canal. The tender of Messrs. R. T. Hortop & Co. (£3,217) has been accepted for the construction of a subway at Ford. For the erection of 134 houses at North Prospect, the Committee have accepted the tender, £79,874, of Mr. James Cockerill. The Corporation are to sell the Beechfield Estate to the G.W.R. for the purpose of erecting houses for railway men.

POPLAR.—The Bow Council has authorised the preparation of

plans and estimates for the provision of washhouse accommodation on a site at North Bow. Houses are to be erected on the Chapel House Street Estate at a cost of £8,500. Shops and flats are to be erected in Bow Road at a cost of £30,759. The public library is to be extended at a cost of £3,900.

SILKSWORTH.—A new school for 304 scholars is to be erected at a cost of £5,353.

WARRINGTON.—The Town Council are considering the use of land at St. Elphin's Park Estate, for housing.—Three dwellings for firemen are to be built in Cambria Place.—Structural alterations, etc., are proposed at the Technical School at a cost of £3,000.—The Borough Engineer has prepared a plan for a new bridge over the river near Manor Lock, to facilitate town development.—Subsidies voted: three houses, Orford Avenue, for Messrs. W. & A. Ashton; four houses, Orford Road, for Messrs. Brainhall Bros.; twenty-two houses, Venn Street, for Messrs. R. & S. Smith.—The Council are preparing plans for fifty-four houses on the Reynolds Street site.—Plans, passed: pavilion in recreation ground for Messrs. Rylands' Club; Wesleyan church and schools, Ellesmere Road, for Wesleyan Trustees; substation, Kerfoot Street, for Electricity Committee; alterations and additions to Warrington Conservative Club.

WEST CORNFORTH.—Plans have been prepared for a new school for 350 children at a cost of £5,288. The Parish Council propose to light the district by electricity at a cost of £2,500.

WHITELEAS.—Durham County Architect has prepared plans of a school for 270 scholars at an estimated cost of £3,912.

WILLINGTON.—The Urban District Council has prepared a scheme for the erection of a further 60 houses.

YORK.—The City Council has passed plans for six houses, Beech Avenue, for Messrs. R. Johnston and Sons; two houses, Beech Avenue for Messrs. C. Martin and Sons; two houses in Hull Road for Mr. T. Harrison; and four houses in Huntingdon Road for Mr. J. Dowling.—The Council have arranged with the Derwent Valley Light Railway Co. for the erection of a bridge across the railway.—The City Engineer is to prepare a scheme for a sunk bath about 100 feet by 30 feet at Pond Garth.—A sub-committee who visited Leeds to inspect concrete houses report that concrete houses would certainly not be cheaper than brick houses, and would possibly be a little more expensive, but this, of course, would be compensated for by more rapid construction. The sub-committee recommends that 300 concrete houses should be erected on the Tang Hall Estate.—A proposal is made for a bridge across the Ouse at Clifton Scope, estimated to cost £73,500.

Fireproof Bitumen.

A highly successful demonstration of a new process of treating bitumen so as to render it stable and non-inflammable was given at Manchester, at the works of Messrs. D. Anderson & Sons, of London and Manchester. The results of the test which was carried out under searching conditions, are of great commercial interest, for they tend to show that a longstanding problem, not only of builders and fire insurance companies, but also of electric cable makers, engineers, and many other manufacturers, has been solved. Hitherto the bitumen used in manufactures has been both combustible and liable to soften at comparatively low temperatures—two serious defects, particularly in building construction, and in cable and all electrical work. The Fire-Resisting Felt Bitumen, which was the subject of the test at the Stretford Works of Messrs. D. Anderson & Son, Ltd. (of London and Manchester), before a large company of surveyors and experts, seemed to justify the claims of its manufacturers that bitumen has at least been made fire-resisting and stable at costs which make it a thoroughly commercial proposition. For the demonstration a building was constructed in the open—21 feet long, 7 feet 7 inches wide, the height in front 8 feet, and at the back 10 feet 6 inches. It was divided by brick walls into three compartments, each with a wooden door, the compartment on the right being roofed with tiles, that on the left with slates, and the central compartment with bitumen felting prepared by the process discovered by Mr. R. O. Child, Messrs. Anderson's chemist. At the back of each compartment was a glass window 3 feet 4 inches by 2 feet 3 inches, and on the roof of each a skylight 2 feet by 1 foot 4 inches. The slate and tile roofs were supported with fireproof rafters so that the tiles and slates would not crash to the ground, but the wooden boarding under the bitumen felting was not fireproofed.

Each compartment was about a third full with wood and other combustible material. First the wood, etc., in the two end compartments was ignited, with the object of showing that the bitumen roof between them would not get alight from the outside. Soon the heat was so great that the glass in the windows cracked and melted and, as more paraffin was poured on, the breeze fanned the flames until the fires were glowing like furnaces. Soon many of the tiles to the right were up-ended and broke into fragments and the slates on the left were sagging and dropping. Given a freer exit the flames mounted high through gaps in the roofs and the skylights as well as the back windows. It seemed impossible that the middle roof could withstand the attacks from both sides. For fully a quarter of an hour the fires burned intensely on each side, but at the end the bitumen roofing was intact. When water was poured on the tiled and slate roofs they broke and splintered. Next the fire was lighted in the middle compartment. Because the outlet for the flames was narrower they burned more violently and rushed through the skylight with tremendous force. It was like a chimney on fire. The roof was being subjected from inside to a temperature, it was calculated, of about 4,000° F. Untreated bitumen melts at 250° F. and glass liquifies at between 3,000° and 4,000°. For some fifteen minutes the fire was encouraged and incited, and at the end of that time not a vestige of its effect was visible on the bitumen roof. Water was poured on it, but unlike the tiles and slates, the bitumen remained stable. It showed no tendency to melt or become liquid, to break or crack. The tests proved to the satisfaction of all onlookers that:—(1) Bitumen treated by the Anderson process will not support combustion, and for the purposes for which it is used is non-inflammable. (2) While ordinary bitumen will be softened by heat and liquifies at 250° F., and in the case of covered cable, for example, will allow the copper core to sink from the centre, the processed bitumen remains stable under very high temperature. It is suggested that this treatment will render it a good roofing material, and that the bye-laws forbidding its use in lieu of tiles or slates should be repealed.

"The Architect" Fifty Years Ago.

AUGUST 1, 1874.

THE ROYAL GOLD MEDAL: MR. STREET.

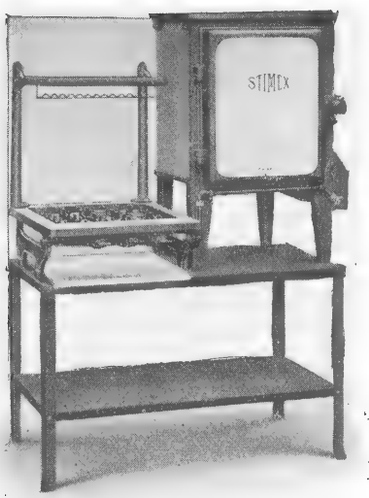
The conclusion which has been arrived at by Her Majesty the Queen, with regard to the quandary so courageously brought about by Mr. Ruskin, is, as all persons of common sense anticipated, the simply common-sensible one that the Royal Institute of Architects shall nominate another person to receive the supreme distinction of Gold Medallist for 1874—in the room of Mr. Ruskin, we had it on the point of the pen to say, as a mere form of words, but it is a most important thing to point out that this would be an error. The preferable way, and the only proper one, in which to arrive at a satisfactory understanding of the position, is to take it that the untoward nomination of the distinguished "Oxford Graduate" had never been consummated; to thank the recipient of the incomplete honour for having so frankly and indeed promptly pointed out the mistake that had been committed; to regret for a passing moment that the correction should have come a little later than the Royal donor may have wished; and thus to be prepared to receive again at the hands of the Institute Council the nomination which it is their function to offer. But it is not, we venture to think, as a *pis-aller* upon the previous proposal that it can be accepted: the Council must be in some way able to make it appear that this is the proper nomination which ought to have been made in the first instance, and which would have been made but for an untoward blunder, which it is the safest course, as it is the most generous, for them to acknowledge as their own, inasmuch as all the world, their constituents included, will, without any reservation, place the blame upon their shoulders. Even in the very worst view of the case, however, this is not the first time that a little piece of spiritless toadyism has been committed in a scientific council, and it cannot be expected to be the last.

The Council are not unlikely, of course, to feel that the odium should rest elsewhere; and we have on other occasions than the present done what we could to relieve them of the unpleasant burden by directing attention, we hope with all respect, as it certainly was with all good feeling, to the suggestion, which has been frequently made in private, that the error lay in the general principle of selection established by past Councils, rather than in the particular act which has brought the present one into ridicule; but, at any rate, it becomes more than usually important that the new nominee should be for once the right person in the right place, and we have to announce that the name of Mr. Street, R.A., is not put forward for the approval of the Institute at a special general meeting to be held on the 17th of August.

At a meeting of the directors of Messrs. Gaskell & Chambers, Ltd., of Dale End Works, Birmingham, held on Wednesday, July 23, it was resolved: "That an interin dividend of 6 per cent. on the ordinary shares and 6 per cent. on the preference shares for the half year ending June 30, 1924, be paid on August 1, 1924, less income tax at 4s. 6d. in the £1.

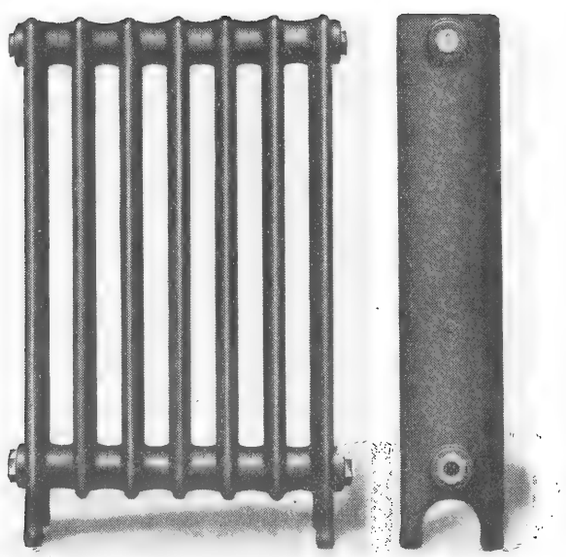
New Catalogues

The New Stimex Gas Stove Co., Ltd., of Stimex House, Balham Hill, London, S.W.12, have sent us their new price list, containing particulars, illustrations, dimensions and prices of their patent gas cookers, circulators, etc. A great advantage the Stimex gas cooker has is the fact that there are no burners in the oven, and the company claim in this connection the following: Gas consumption in the oven is reduced by practically half, no flues where live gas may collect, and so cause an explosion; smells and smoky ovens are prevented, because fat cannot splutter or run over on to burners. Temperature in the oven is not lowered by sudden draught when an outside door is opened (this point will be greatly appreciated by the cook); perfect control of the heat of oven is easily maintained, and with no burners oven is always perfectly clean. The company supply the usual designs in gas cookers but with the advantage pointed out of freedom from burners in the oven, but they also have



a design, of which we give an illustration, of the New Queen Eye Level Gas Cooker. As will be seen this obviates the back-aching proceeding for the cook in attending to the oven, and should make this design very popular.

The National Radiator Co., Ltd., of Hull and 439 and 441 Oxford Street, W.1, the well-known makers of the Ideal Radiators and Boilers, have just placed upon the market a new design named the Ideal Hospital Radiator, which, embodying the advantages of the earlier designs, has in addition a valuable feature, that for a given heating surface it occupies much less floor space, the space between the columns is $1\frac{3}{8}$ in., which gives ample facility for cleaning, and there is also ample room beneath the hubs. These radiators may be fitted with the firm's Astro hinge fittings, when it is desired to swing them from the wall, a particularly useful idea for hospitals, sanatoria, class-rooms, dormitories, etc.



We illustrate a radiator by which it will be seen that it is simple and easy to clean, and, what is of special importance, that sufficient space is left to enable the floor underneath to be easily and properly washed.

Ideal Hospital Radiators are tapped $1\frac{1}{4}$ inches at top and bottom. The sections are $5\frac{3}{4}$ inches wide, and are assembled with heavy malleable iron right and left-hand threaded tapered nipples to $2\frac{5}{8}$ inch centres, thus giving them the additional advantage that for a given heating surface they occupy much less floor space than other types.

We have received from Electric Control, Ltd., of Empire Works, Bridgeton, Glasgow, an advance copy of a new illustrated four-page leaflet—No. 12H/X—which gives examples of the firm's exhibits at the British Empire Exhibition.

These include "Empire" Automatic Control Gear for lifts, hoists, pumps, compressors, machine tools, steel mill auxiliaries, printing presses, capstans, cranes, winches and winders.

This leaflet, being chiefly pictorial, contains illustrations larger than the general rule, which effectively render all detail.

It is well printed in black and blue on stout paper, and copies may be had on application to the head office.

The name of Shanks at once brings to mind baths, lavatories, etc. Messrs. Shanks & Co., Ltd., of Barrhead, Scotland, 81 New Bond Street, London, W.1, 12 Deansgate, Manchester, with branches in Glasgow, Newcastle-on-Tyne, Bristol, Liverpool, and Dublin have sent us their list of new types of lavatories in vitreous china, and we cannot do better than produce Messrs. Shanks's own explanation:—

The lavatories are new in design and embody certain novelties in the arrangement of fittings.

The waste fitting, which is known as the "Pop-up" waste, is so constructed that when clean water is admitted to the basin it does not come in contact with the waste or overflow channels, and consequently is free from contamination—an important sanitary advantage. In two of the illustrations a new type of supply arrangement is shown whereby the streams of hot and cold water are combined in a channel made in the ware, and issue through an orifice in the hood that covers the overflow. All brass-work is practically covered with vitreous china and the tap handles and waste knob are made in the same material. Polishing taps is thereby rendered unnecessary. Special methods of fixing the lavatories are illustrated, and the whole designed to avoid metal being exposed.

These advantages, combined with the fact that the lavatories are made of the strongest and most durable ware in the world, should commend their use for all purposes.

The illustrations are beautifully reproduced and on good art paper, and a reference sheet is enclosed giving dimensions and prices.

Mr. Marcel Porn, 21 Mincing Lane, London, E.C.3, who is the agent in this country for "Stigler" lifts has sent us a copy of their latest catalogue which contains views of various public buildings on the Continent in which "Stigler" lifts have been fitted. The company, which was started in 1871, have received a large number of testimonials, which are also published.

The London Hydraulic Power Co., of Hatfield Street, Southwark, S.E.1, send us a copy of their map which they have produced, which shows very clearly the number of streets in London in which their mains are laid, those desirous of making use of hydraulic power should obtain a copy of this map. The company supply power on the high pressure hydraulic system at a pressure of 700 lb. per square inch.

Electrical Note

Messrs. S. Rentell & Co., Ltd., proprietors of "Electricity," have an interesting exhibit on their stand at the British Empire Exhibition, Bay 14, Avenue 15, in the Palace of Engineering.

The exhibit is contained in a circular glass case, and consists of a number of electric lamps as follows:—

1.—One original Swan Lamp.
2.—One original Edison lamp. Both these lamps were in use in the Crystal Palace Electrical Exhibition in 1882.
3.—One original Swan United lamp.
4.—One Khotinsky lamp.
5.—One Khotinsky lamp, but with pink stripes in the bulb.

This last lamp is evidently an attempt to introduce colour in lighting. When one glances at this lamp and then remembers the extensive use of colour in illuminating the grounds of the Exhibition, the enormous strides made in the use of colour in lighting can be realised.

Another item of the exhibit is an old fuse carrier. This is made of wood, contact with the fuse wire being made through the medium of wood screws. Comparisons between this and the modern fuse carrier which has to meet Home Office requirements will at once indicate the extensive progress made in this direction.

A Woodhouse and Rawson lamp of about 1887 has since been added to the exhibit.

VOL. CXII.—2903. THE ARCHITECT AUGUST 8, 1924.

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Stewart Bale, Liverpool.

LIVERPOOL CATHEDRAL: THE CHOIR, LOOKING EAST. SIR GILES GILBERT SCOTT, R.A., Architect.

Architectural Education.

The very fine collections of students' drawings of this and other countries which have been on view at Grosvenor House, Devonshire House, and the R.I.B.A. galleries may be considered from two aspects. The first of these is whether it is either possible or desirable to follow the same lines of education in different countries; the second, whether, having defined the end which is desirable in a given case, we are taking the right means to produce that result.

We may for purposes of our enquiry assume that England, France and America are the countries chiefly under consideration. In France the influence of the Ecole des Beaux Arts is paramount, and succeeding generations of brilliant Frenchmen are continuing traditions formulated at the time of Louis XIV. which have suited the special genius of the French race. Whatever has been the nature of French Governments, æsthetic developments have followed on closely similar lines, and the influence of L'Art Nouveau movement has but proved a temporary disturbance in the still waters of æsthetic conviction. Under these conditions the architectural development of France has been a steady and continuous one; new forms of construction and engineering have been woven into the fabric of French building without materially altering its characteristics. It would be hard to say

of any modern country that it possessed a really educated public, but France at least can claim that its people are more easily content to be guided in matters architectural than those of most other countries. Under these circumstances education has been a comparatively easy matter, and what the French student is doing to-day is the outcome of principles and traditions adhered to for generations.

America, with the exception of its first colonial buildings, the work of English, French and Spanish settlers, has no long historic past, but has been the scene of greater and more rapid development than any other country. Its enormous wealth and energy have been turned into building as to other fields of activity with the result that cities which are mere names to many of us can show architectural schemes which we should regard as worthy of the capital city of a great empire. The outcome of the world war has accentuated the process, and it would seem that in America the dreams of the Cæsars may be paraphrased in the garments of modernity.

America has found in the French system a method which, altered and varied to suit great problems, seems to supply her needs, and the great American schools and their work bear a close resemblance to those of France.

The completeness and finality of French expression undoubtedly appeals to American thought, while America is unhampered by the possession of a past in the niches of which room has to be found for the future. The American immersed in business affairs is usually more willing to be guided in æsthetic matters than are our own people.

Here we have the reversal of many of the conditions which obtain both in France and America. We have absorbed the principles of the Renaissance in a different manner to that of a Latin race and the "old Gothic leaven" shows its trace and influence in much of our later work.

A dying tradition has not been replaced by a system like that of France, and until the inauguration of the various schools here there was no systematised method of training. Now we, as was evident to those who visited Grosvenor House, have a machine which, whether in London, Liverpool, Manchester, or Brisbane, is practically producing a very similar result. We look almost in vain amongst hundreds of drawings for evidence that the great traditional work of our own country has been studied by the student. There is much careful and painstaking design, much good draughtsmanship and colouring, and evidence of considerable constructional knowledge, but there is little more to say. We believe that students are encouraged to design at too early a stage, and devote too much attention to what should come at a later stage.

The mind of a man may be likened to a library. Those who have seen and studied are like those who have many books. Those who have not are the possessors of empty shelves. It is the possession of a great mental library which more than anything else differentiates the "inspired designer" from his fellows. He instinctively thinks in terms familiar to him, and it is the possession of his mental library which seems to us to be the all-important factor.

And how better can we select material than in studying the past work of our own country, every section of which is rich in works of the historic past?

And how can this desideratum be better compassed than by measuring and sketching, both of which impress sensations not only on the retina of the eye but on that of the brain?

We do not mean that our students should make meticulous drawings, in which they should show every stone joint in its exact place, but they should familiarise themselves with the outlines, proportion, detail and construction of the buildings measured, and make workmanlike drawings of them. Why should the schools not gradually make a survey of the works of the historic past, which would in every district enable men to work in that district in accordance with its "regional" characteristics? We do not want replicas or copies of the past in our work, but we may reasonably hope for work developed out of that past, and this, it seems to us, is all-important in the interests of English architecture. Our best modern work is to be found in our houses, which have been the outcome of an unsystemised study of the past. But looking through the students' work it would seem that this simple subject is generally omitted. Are we or are we not contented to let the one outstanding achievement of modern English architecture suffer by our neglect?

We have elsewhere indicated what seems to us to be weak spots in the curricula of the schools—points on which many will not be in agreement with us—but we are convinced that the present tendency of the schools is to follow too closely the precedents set by two countries, which, as has been pointed out, approach the problem governed by considerations which do not obtain here.

The tuition of the Liverpool School has been proved to be an excellent preparation for the winning of the British Rome Scholarship, the Architectural Association School has produced many dexterous and accomplished draughtsmen, and were we looking for those who could devise or help in the production of an architectural pageant we should instinctively appeal to it, but if these schools are to be regarded as a substitute for the old system of pupilage and as fitting the student for the realities of architectural practice and design, we may question whether their system justifies itself. Even M. Girault, a typical Frenchman of genius, has clear doubts as to the methods hitherto pursued in France, and we believe he might have even more doubts as to modern tendencies here. Much good has been done by our schools in creating enthusiasm and encouraging men to work, but it seems clear to us that this energy and work should be directed into altered channels if it is to effect permanent good.

As far as we can judge, France and America have found what suits their wants in the matter of education. We do not think that the work exhibited shows that we have yet done so, which is not strange, seeing the comparatively recent date at which we have inaugurated our schools.

"The Architect" Fifty Years Ago.

AUGUST 8, 1874.

THE HOP AND MALT EXCHANGE.

On July 30, under an order in Chancery, the extensive premises known as the Hop and Malt Exchange, in Southwark, were submitted to public auction, in one lot, by Messrs. Marsh, Yetts, and Milner, at the Mart, Tokenhouse Yard. The buildings occupy a ground area of 26,000 feet, the elevation being 95 feet, and the street frontage 350 feet, the total floor area being 221,169 feet. The premises were mortgaged for £50,000, and the equity of redemption sold reached £27,800. The value of the property as realised by the sale, therefore, was £77,800. The original cost of the ground on which the buildings stand was £60,000, and the erection of the premises cost £75,000, so that the price given for the whole was but little more than the original cost of the building alone, or about £3 per foot for the ground, including the premises erected upon it.

Stewart Bale, Liverpool.

LIVERPOOL CATHEDRAL: VIEW FROM SOUTH-EAST TRANSEPT. SIR GILES GILBERT SCOTT, R.A., Architect.

Our Illustrations.

LIVERPOOL CATHEDRAL.

LINCOLN FRONT QUAD AND ENTRANCE, OXFORD.

BRASENOSE, SHOWING RATCLIFFE CAMERA AND ST. MARY'S SPIRE, OXFORD.

ALL SOULS FRONT QUAD, OXFORD.

ALL SOULS QUAD, OXFORD.

Liverpool Cathedral.

Through the courtesy of the "Manchester Guardian" and of the artist we are able to give a reproduction of the admirable drawing of the Cathedral transepts made by Mr. Schwabe, which emphasises its mass and composition in a manner that is arresting in its simplicity. We shall hope at a later date to be able to record, if not the completion of the whole building, the completion of the central portion with the great central tower as redesigned, and we hope that if any portion of the great building remains incomplete it will be rather the western portions of the nave than the culminating feature of the building as now intended. The completion of the nave would be always possible in the future since it involves the repetition of parts already designed and carried out, whereas the tower is an independent feature as well as the culminating note on which the effect of the mass will always essentially depend.

If this generation does not see the completion of the whole scheme under one architect, the nave would probably be carried out on the lines laid down, whereas it is quite probable that another architect appointed to carry out the central tower would revise its design. Also there are in this and other countries too many buildings which have been shorn of the central features contemplated, and towers, spires and domes once omitted are very seldom completed.

MOUNT WISE, DEVONPORT. GROUP OF SMALL HOUSES, LATE 18th CENTURY.

SALUTATION INN, TOPSHAM, DEVON, 1720.

The Architecture of the West of England.*

In the preface to this book the authors state that "To re-establish simplicity and good taste two factors are essential; the first concerns the education of the public, and the second the training of the architect. In addition, every effort should be made to encourage builders, and through them the host of mechanics engaged in the realisation of material schemes, to form classes of instruction in all that applies to the construction of new building destined to form part of the picture of England." This is well put, except that what is called the education of the public must come by means of the architects' work, unless, indeed, it were partly formed and fostered by the inclusion of architecture in the curriculum of all our schools, like mathematics and classics. Those two subjects would never interest or be understood by the average man were it not that he receives early and compulsory instruction in them, and the same may be said of architecture. But architects have it in their power by combined effort directed towards a common end, with or without the help of the public, to largely mould the architecture of England, and we can conceive it moulded in no better way than in conforming to the local or "regional" traditions of the land in which we live. The authors define the regional division of our architecture as follows: the Northern between the Humber, Mersey and Tweed, the Eastern embracing the country to the east of the Great North Road, the Midland from that road to Wales and as far south as Bristol, the Southern embracing the southern counties from Kent to Dorset, and the Western including Devon, Cornwall and the Isles of Scilly, to which may be added Scotland and Wales taken as separate entities. We should have been inclined to put Wiltshire, Dorset and Somerset in a separate division, but otherwise the divisions stated form clearly defined and characteristic groups. It is well that such areas should be studied, for the local differentiation of building constitutes one of its greatest charms and much of it is founded on local wants and

THE ROYAL HOTEL, HORSEBRIDGE, CORNWALL, 1820.

* "Regional Architecture of the West of England," by A. E. Richardson, F.R.I.B.A., Professor of Architecture, University College, London, and C. Lovett Gill, F.R.I.B.A., London. Ernest Benn, Ltd., London. 45s. net.

materials, which should largely govern our efforts to-day as they did in the past. Doubtless much too is due to the proximity or remoteness of London, which has usually been the gateway through which foreign influence has entered the country. Elsewhere, as the narrative told by the authors relates, the sea coast has been the source of the introduction of new methods of building which influence the provincial vernacular. The architecture of Devonshire, and particularly that of Cornwall, is largely governed by the use of granites and other hard materials, by the greater humidity and warmth of the West and by the greater isolation of life there.

The book gives chapters on The Western Region; The City of Exeter, Plymouth, Stonehouse and Devonport; The Development of Regional Architecture; The Middle Period, 1730–1780; The Late Period, 1780–1810; Regency and Early Victorian, 1810–1850; Princetown, The Isles of Scilly, and a Conclusion. The illustrations given of both Exeter and Plymouth serve to remind us of the wealth of good and interesting work which exists in many of the provincial centres, while the representations of Cornish buildings show the influence of material in the form of granite on design compared with the corresponding buildings of the South and East of England. Most of the illustrations appear rigidly simple and stern in expression, but they suit their environment as nothing else would do and for that reason afford good prototypes for modern work in the same localities. External cornices are either reduced to the barest elements or altogether omitted, window openings are usually unmoulded and porches of the simplest character, all bearing testimony to the fact that the nature of the materials used forbade elaboration, while the element of cost was unquestionably often a dominating factor. The almost universal use of slates had in Cornwall, as elsewhere, its influence in the direction of simplifying roof forms, a tendency doubtless accentuated by the necessity of protection from wind and weather.

The authors emphasise the comparatively late date at which the traditions of the Renaissance penetrated Devon and Cornwall, but when adopted they were adhered to with greater tenacity than in less remote localities, as is shown by a number of illustrations of the work of comparatively recent times contemporary with the efforts of the Victorian "revivalists" in other parts of the country.

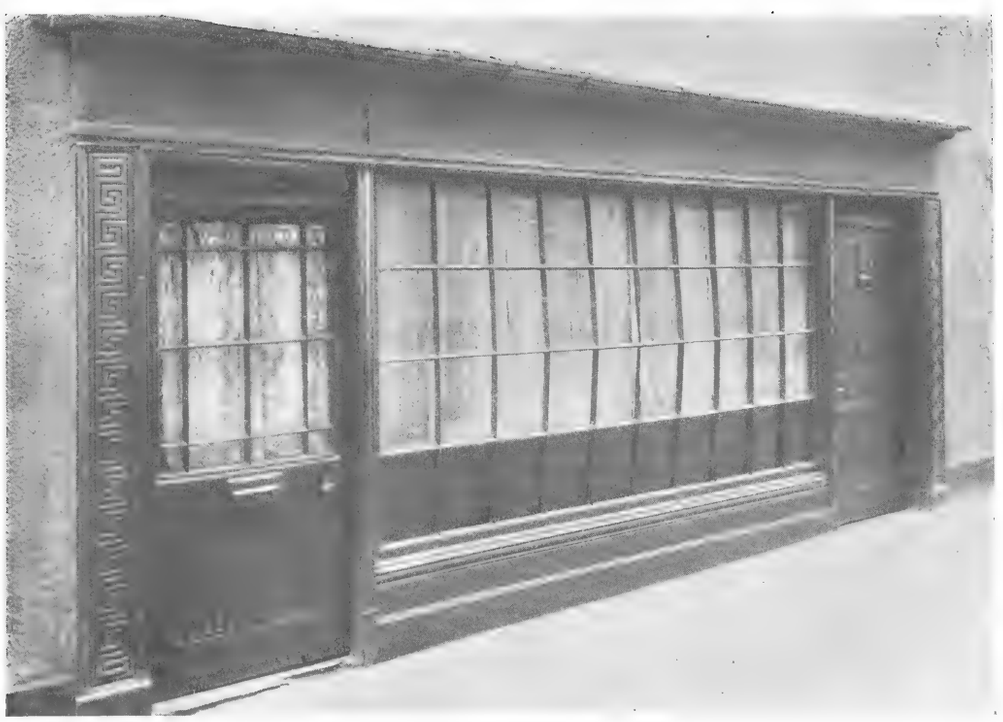
The Royal Victualling Yard at Stonehouse, by Sir John Rennie, built in 1830, shows how good much of his later work is, while the Ballroom at the Royal Hotel, Plymouth, by John Foulston, and the Proprietary Library by the same architect are excellent examples of the work of a slightly earlier date.

The work of the late Regency period is interesting in its eclectic nature, as is shown by the interlacing sashbars of the little hotel at Horsebridge, dated 1820, and the Entrance Lodge at Tor Royal, Princetown, 1795, while the cambered and slated bay windows, of which many illustrations are given, are a pleasant and characteristic local feature.

The greater richness of Devonshire and its closer connection with the rest of England as well as the position it held for centuries as the centre of a sea-loving people has influenced its building development as well as provided means for a greater expenditure of money in building. Barnstaple, Bideford, Topsham, and other centres, as well as the City of Exeter and Plymouth, have been considerable centres of building and have a character distinguishing them from structures in the more sterile and wind-swept country of Cornwall, which suggests a land connected with England rather than a part of that country. Boundaries of influence are peculiarly difficult to define, and we might make a good case for including Devon with Somerset and Dorset rather than with Cornwall. Be this as it may, we have to congratulate the authors on the production of a work which is full of interest and suggestion, and which is admirably and fully illustrated by a long series of very well-chosen illustrations.

The book is one which will be valued not only as an architectural work, but a book full of biographical and historical matter such as render it of interest to the public. The novels of Baring Gould and Trevenna give the atmosphere of the Western Counties, and so also does this book transport us into an atmosphere remote from London immersed in its own traditions, picturesque in its characteristics, and having a vitality of expression we hope to see carried on by the work of our generation. Professor Richardson's own work for the Duchy of Cornwall shows how faithfully he is carrying out the aim he has defined.

We hope that Messrs. Benn will endeavour to obtain the services of writers able to describe the rest of the country in the same admirable manner as that in which the authors have dealt with the West of England, for such books are of permanent value and interest both to architects and the public.

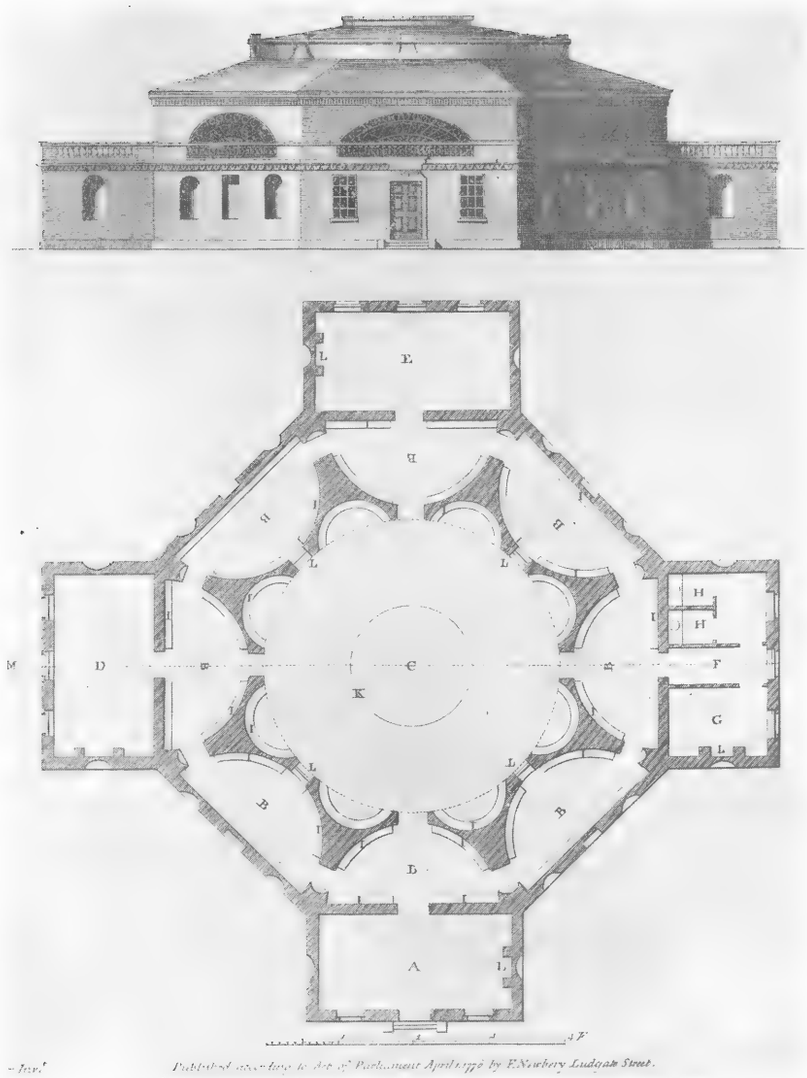


SHOP FRONT, THE MINT, EXETER.

ENTRANCE TO THE ROYAL VICTUALLING YARD, STONEHOUSE, PLYMOUTH. Sir John Rennie, Architect.

A Precursor of the British Museum Reading Room.

Suggested, but not carried out, in 1776.

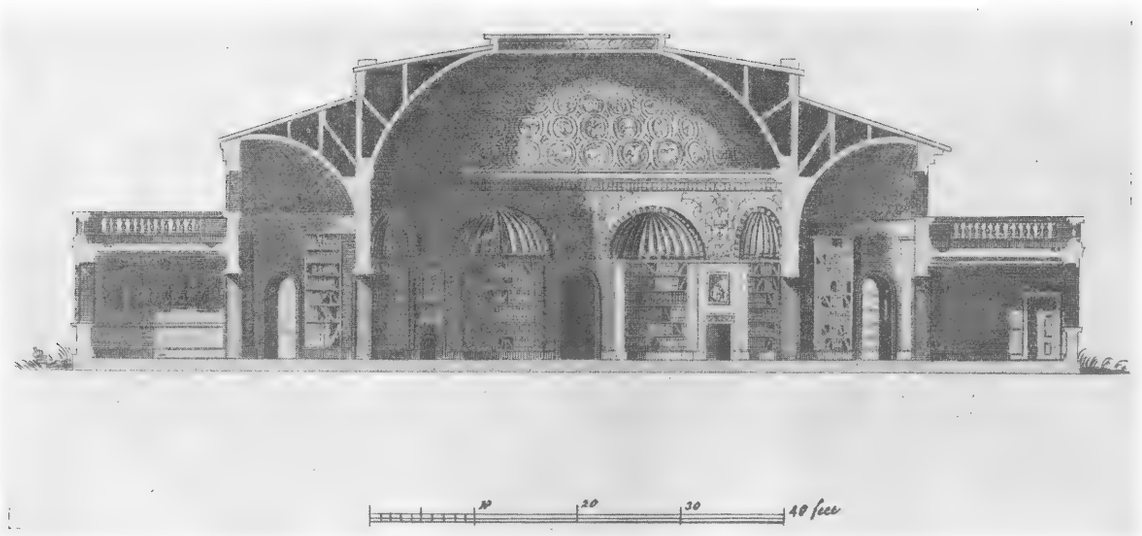


AN EARLY DESIGN FOR THE BRITISH MUSEUM READING ROOM.

When, on May 5, 1852, Panizzi submitted his plan for a new Reading Room to the trustees, it was received with enthusiasm, nor was any doubt thrown on its originality by the earlier suggestion of William Hosking, published in " The Builder " for June 22, 1850, for erecting a reduced copy of the Pantheon in the space selected by Panizzi, since that great man never saw Hosking's plan until long after the works for carrying out his suggestion had been introduced. (Letter to Hosking in Fagan's " Life of Sir Antony Panizzi," I., p. 371.) It seems to have escaped notice, however, that a remarkable foreshadowing of Panizzi's scheme was produced by John Carter, F.S.A., in " The Builder's Magazine," the two plates illustrating it being published in successive numbers on April 1 and June 1, 1776. That this scheme is wholly original and, for its date, remarkably practical there seems no reason to doubt, and as a contribution to the history of library design it deserves resuscitation from the decent obscurity of Carter's pages.

Round the circular skylit Reading Room, or grand library, which forms the centre of Carter's design (Plate I.) run a series of eight semi-circular bays (I.) fitted with bookcases and surmounted by niches (see Plate II.). These, we may assume, contained the English books. Each bay is divided from the other either by a fireplace (L) or a door, the four doors giving access to B., eight much larger semi-circular niches facing outwards and containing —as the text to Plate II. informs us—books in different languages, What those languages are Carter, unfortunately, does not say. We may conjecturally fill in the list as follows :—i., Greek ; ii. and iii., Latin ; iv., Hebrew ; v., French ; vi., Dutch and German ; vii., Italian ; viii., Spanish. These eight bays, all communicating by outer doors, are flanked on the outside by straight external walls broken by large, semi-circular fanlights, thus forming an octagonal building which becomes cruciform by the addition of an oblong structure on alternate sides. A is intended as an entrance-hall, D as a refreshing room, G as a private room for the keeper, while a fourth is subdivided, H being the lavatories, G " a room for the people who have the care of the library." The ceiling of the circular reading room and the arched spaces between the niches over the bookcases are enriched, as the section shows, with elaborate plaster mouldings betraying, like the fine ironwork of the fanlights, the influence of Adam, and a well-proportioned balustrade adorns the exterior and to some extent makes amends for the weakest point in the decoration, the blank windows below.

The plan is certainly impressive, and shows an unusual attention to the wants both of librarians and readers. The system of top-lighting gives the maximum space for book-storage ; the communication between the different parts of the building is ingeniously managed, and the provision for a refreshment room proves that the bodily needs of the users of the library were not considered beneath contempt. Carter says nothing of cooking arrangements. Perhaps he contemplated readers and staff bringing their own provisions ; but he saw the impropriety of eating among books and guarded against it in the only reasonable way. The heating



SECTION OF READING ROOM.

arrangements also call for notice. Fireplaces are put in A—presumably for the porter's benefit—D, E and G, while the large bays B and the central library are heated by four chimneys "designed to give heat both ways," and foreshadowing the recent invention of Mr. Pemberton-Billing. Had any public-spirited person taken up Carter's challenge and carried out his plan, we might have had a great eighteenth-century library building to set against the University libraries, on the one hand, and the modern library on the other; while Panizzi's great scheme for a circular reading room would not have remained without any but a paper precedent.

R.I.B.A. Educational Conference Dinner.

The R.I.B.A. dinner at the Hotel Victoria last Thursday was attended by a large number of distinguished guests who had taken part in the Conference. After the President had proposed the toast of "Architectural Education" in a brief speech, M. Charles Girault, whom the R.I.B.A. have recommended as the recipient of the Royal Gold Medal, expressed, on behalf of the architects of France, their great pleasure at having had an opportunity of attending the Congress. He would assure them that they had taken a very great interest in the enlightened views on education which had been expressed in the discussions, of which they would all reap advantage. If the different groups of people had, by reason of their different countries, their different customs, their social state, adopted different methods of practising the art of architecture it did not matter so long as the great principles of the art could be made to serve as a basis of study for the architecture of the country in which the architect practised. An equal admiration should be reserved for mediæval architecture and for the beautiful architecture of ancient times. In considering the materials to be used in building they should take into account the climate, the ways of the people, and the temperament of the people, and seek logically the problems which had throughout the ages confronted mankind. To transport the methods of one country into another without knowing the traditions and customs of the country in which the method of building originated was illogical, and was not the way in which would be produced a good building which would be the admiration of those who beheld it. When, in order to educate their young architects, they placed before them the best examples of the past, it was not to incite them to copy them, but that they might apply themselves to the gaining of a knowledge of how the great masters of the art of building had gone about their work. Past generations had left imperishable monuments which were witnesses to their ability in the art of architecture and which also were records of the customs and politics and religion of their times. Architects of the present should not confine themselves to erecting monuments to meet the popular demand, but should in every case satisfy themselves that the laws of hygiene were followed, so that the buildings would be healthy and pleasant habitations. More than ever the study of architecture should concentrate on the study of small houses. Perhaps it was hardly necessary to emphasise this to their English architects, who had given them a lead in the design of working-class dwellings, for it was with unmixed admiration that they had seen the housing schemes in this country. In a good house the self-respect of the inhabitants was increased.

M. Girault's views are in complete accord with views we have recently emphasised.

Mr. Cass Gilbert of New York referred to the fact that the architect's work would always be the outcome of the age and conditions under which he lived, for which reason imitation of the past could never be successful, a sentiment which seems to us to be radically wrong, though we might say that no imitation of the past could be exact because of the new conditions which dominated and controlled our work. Mr. Ragnar Ostberg also spoke, and was followed by Mr. Paul Waterhouse, who proposed the toast of "Our Guests, Foreign Countries and Dominions," which was duly honoured by those present and responded to by Sir John Salmon and others. The meeting was a very successful and pleasant one, and terminated after a number of short unofficial speeches had been invited and made.

The American Tablet to Wren.

A mural tablet to the genius of Sir Christopher Wren, presented by the Architectural League of New York, was unveiled last Friday in St. Paul's Cathedral in the presence of a small company of architects and Royal Academicians. The tablet is fixed to the wall in the gallery over the north aisle, and takes the form of a bronze plaque with a surround of golden rod, the American national emblem, and oak leaves entwined. The inscription reads:—"In recognition of the inspiration and enduring influence on American architecture of the work of Sir Christopher Wren, this tablet is inscribed by the Architectural League of New York."

A short dedicatory service was conducted by Dean Inge, and afterwards Lord Balcarres unveiled the tablet in an address which was of unusual merit and eloquence. It was, he said, a testimony to the strength and vitality of Sir Christopher Wren's influence, and though they well recalled the famous admonition against a memorial to his achievement, and the plea that his work rather than his personality should carry his recollection onwards, they might direct their minds to his memory on this spot, where "Thro' the long drawn aisle and fretted vault the pealing anthem swells the note of praise." They stood that day in the heart of the throbbing life of that great city, and in imagination they carried their minds back to that same city in the days of the genius of Wren. He knew the city decimated by plague, shattered by death, devastated by fire, and from the ashes of its despair he raised this giant monument to the hope of immortality. Many generations had passed through the life of the Cathedral, and each had paid its tribute of praise, yet their words were but rippling waves passing over the unfathomable depths of his greatness. Indeed, so great a master was he that one might almost say of him, as was said of the Greatest of all and His followers, "He went before and they were amazed, and as they followed they were afraid." In that dark hour of their history the genius of Wren took wing, hovering like some great spirit over its ashes and desolation, surveying its ruins, and conceiving its massive reconstruction. Creation followed creation, each excelling its neighbour in strength and grandeur, in grace and vitality, and so the city of death became the envy of the world of architecture.

LINCOLN FRONT QUAD AND ENTRANCE. OXFORD.

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BRASENOSE. SHOWING RATCLIFFE CAMERA AND ST. MARY'S SPIRE. OXFORD.

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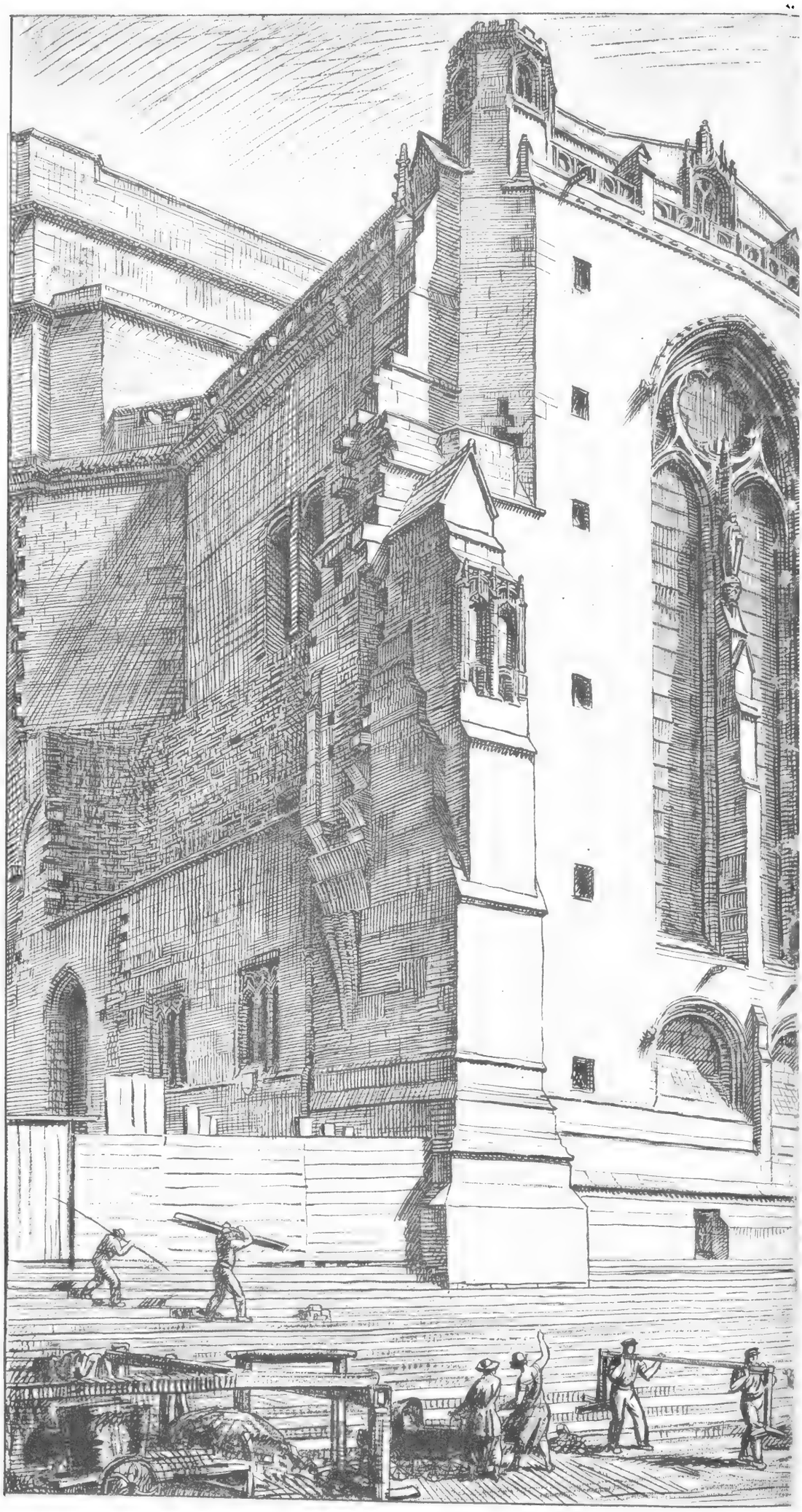
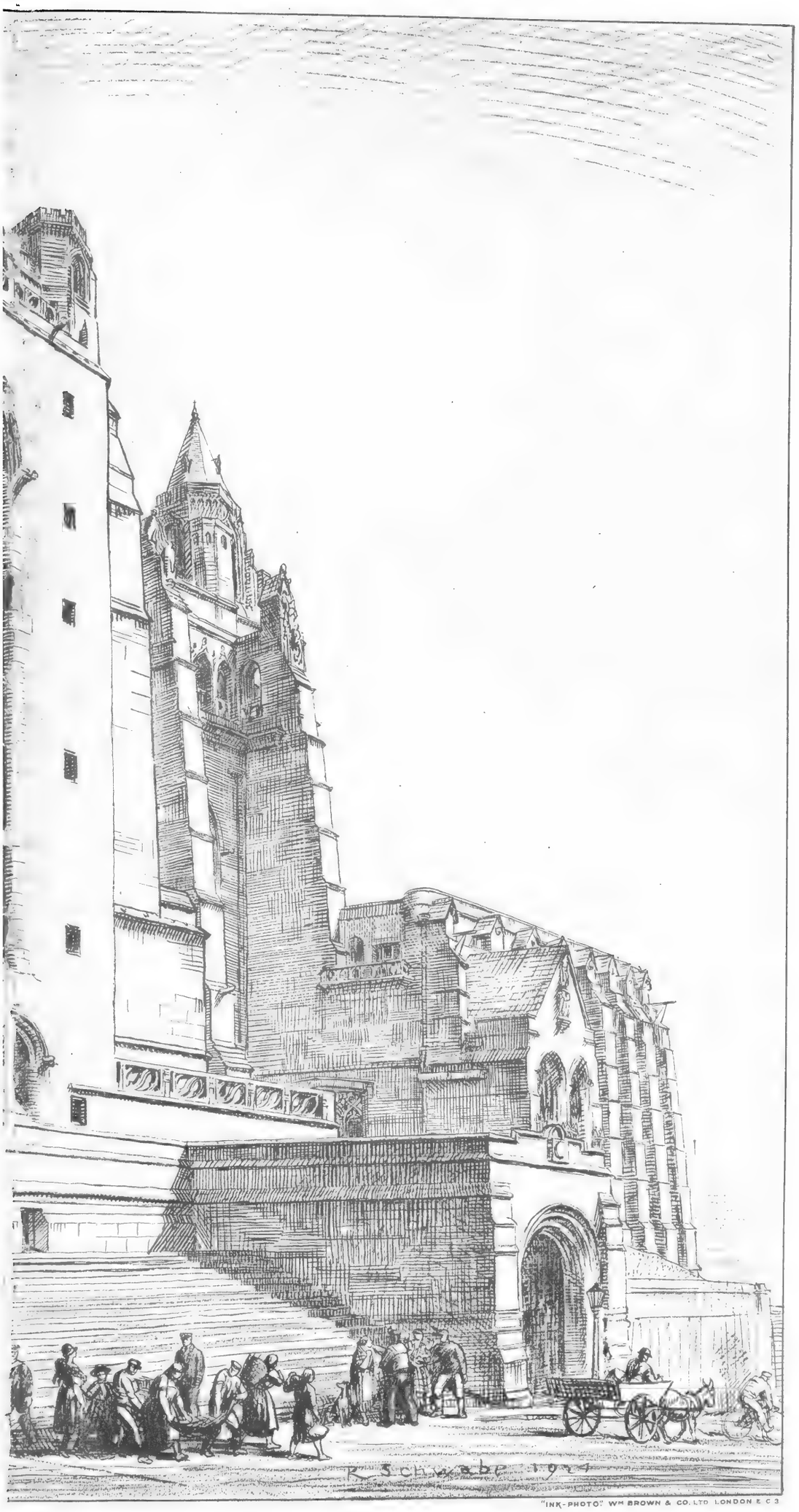


THE SOUTH-EAST TRANSEPT OF LIVERPOO



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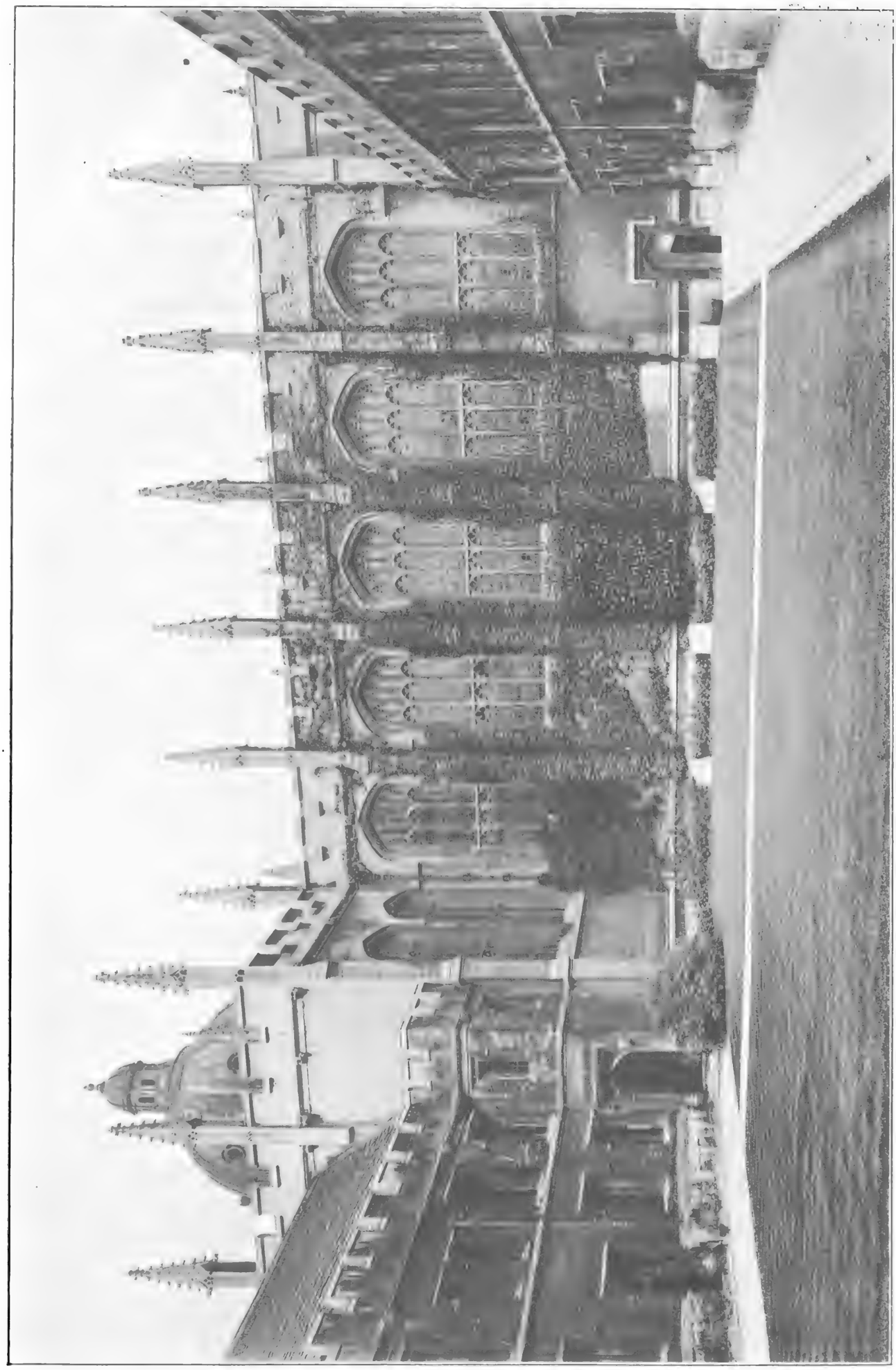
CATHEDRAL. SIR G. GILBERT SCOTT, R.A., ARCHITECT.



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Correspondence.

"Thoughts on Architectural Education."

To the Editor of THE ARCHITECT.

DEAR SIR,—I read with great pleasure an article published in your issue of August the first under the title of "Thoughts on Architectural Education." If men and women would only be true to themselves and the very best that is in them, we should have a real system of education in every way.

Unfortunately schools, colleges and universities are obliged to show results of their work in some tangible form, either by a long list of students who have passed a number of very difficult examinations or by exhibitions of students' work, which in the case of art and architectural subjects have to be rendered in a certain way. To-day too much thought is devoted to the schools and colleges, and very little consideration is given to the student. This system has in art-education been in vogue nearly forty years. The production of exhibition drawings to the detriment of real study.

On the other hand, the world judges an individual by his qualifications, and these are at present only obtainable by means of finished drawings or examinations passed. The difficulties surrounding the presentation of qualifications in consideration for a period of time faithfully spent in sincere study are very great indeed and difficult to subject to a given standard of quality. In architectural practice many of us recognise that the most valuable reference data we can possess is a number of sketch books filled with sketches of places and details we have seen and admired. Reference books can never actually replace the lack of personal sketches made by ourselves. In buildings we have seen we have admired a gable, or a window, or some interior mouldings. If we compare photographs of these buildings with our sketches we seldom find that the view we have so much desired to retain in our memories has been taken. And if so the photograph more often than not does not illustrate or accentuate just those features that appealed to ourselves. Further, when sketching we can measure and note the measurements. Very few reference books have been produced which would supply our needs in this direction. Again, many of us when sketching impart to the drawing an individuality, we may even go so far as to add sketches of possible applications of the details that have given us pleasure. In your article it is stated that the only way to acquire facility in design is by "the two laborious processes of measuring and sketching." The former might be laborious, though the latter surely cannot be so described. The measuring of some of our ancient buildings can truthfully be described as a student's tour of discovery. I welcome your candid expression of opinion on this subject, and the necessity for sketching and measuring cannot be too strongly placed before the student.

In other branches of design it is a recognised fact that an ability to sketch is a designer's greatest asset. What greater pleasure can an artist feel on the discovery of some unique decorative expression characteristic of a certain style which has not been given in the reference books. And we can well imagine an architect being equally pleased in making a similar discovery. Both will seek an early opportunity to incorporate their discoveries in their work. Both will mentally possess a free mind on the question as to their right of using their finds. Whereas such a freedom never exists in the same degree when using data out of reference books. There is no stigma attached to making free use of material you have sketched, whereas it is rather unpleasant to be reminded that your details have been taken from some well-known reference books. Sketching is not a subject which can be acquired at any time of our lives, and therefore every encouragement should be given to the student to acquire the habit of sketching rather than pressing the button of some camera.—Yours faithfully,

AN OLD STUDENT.

"Mr. Wheatley's Dogmas on Housing."

To the Editor of THE ARCHITECT.

DEAR SIR,—We liked your leading article on "Mr. Wheatley's Dogmas on Housing." We are grateful to your journal for having replied in such a splendid way to some questions which Mr. Wheatley put. We think that his definition of private enterprise was very ill advised. If there were no private enterprise there would be no State. National income is derived from private enterprise. In Russia private enterprise has had to be restored. It may be very unfortunate that equality of opportunity is almost impossible owing to inability of the human race to produce men and women with brains which would result in all individuals desiring to make an equal effort to work and exercise the powers given in the best way. Until we have reduced the population of this world to two, and have got rid of all those who are physically unfit to create children, we can never hope to have equality of opportunity. We cannot succeed to a very limited equality so long as one industry refuses to work. If Labour desires equality of opportunity they should remember that whenever one section goes on strike they are depriving other fellow workers of an opportunity of working to the best of their capacities. Equality of opportunity and freedom of the citizen do not mix well in the same world. The moment one individual exercises his freedom he disorganises the whole system. We can educate all people alike, but we cannot instil into everybody's mind that they must work before they can play. Were all the private capital centralised to-morrow, common sense would force those controlling to deal unequally with those who work well and those who will not work or work badly. Otherwise those who work well would soon either rebel or take on the standard of those who do not work, and general starvation and not equality of opportunity would result. Private enterprise must be encouraged. We take it for granted that all the members of the present Government owe their positions to private enterprise. Mr. Wheatley in his own special way has been able to convince others that the enterprise he has used in training his mind in such a way as it has been trained by him has produced a man named for convenience sake Mr. Wheatley. If he were not specially fitted for the post, why has he been selected? Many of the trade union officials have trained themselves to talking instead of working on the railways, mines, or other industries. These men have made the mental effort through private enterprise. They in consequence hold their positions at the expense of their neighbours. We have not the least doubt but that many men in the Labour party feel that they could do Mr. Wheatley's work equally well, but are quite willing to admit that Mr. Wheatley has exercised more private industry than themselves and in consequence is in the position he holds at present. We do not think any of the members of the present Ministry will admit that every member of the Labour party is equally able to take their positions, and that the only difference in them is that one is for convenience called Snowden and the other Wheatley.—Yours faithfully,

H. W., M. K.

"Partnerships between Architects."

To the Editor of THE ARCHITECT.

DEAR SIR,—In your issue of July 18 you published an article entitled "Partnerships between Architects." I thought it might be of interest to your readers to know that it is possible to be successfully associated with a genius and what might appear to many to be an utterly impossible individual. Our partnership has lasted many years and would still be in existence had not death intervened and deprived me of his wonderful talents. Our partnership was a great success financially and otherwise, so much so that I have decided to retire altogether from the profession. I somehow or other could not be happy with another partner, or with a staff of assistants, or, as some might say, ghosts. My late partner was a wonderful draughtsman and splendid designer, he was difficult, in fact, very difficult. I enjoyed a very good architectural education and could possibly have created quite a comfortable practice for myself. But from my earliest recollections I always seemed able to make a great number of friends very easily, and during my college days the social circle grew and grew, until there seemed to be no time left for serious work. I realised that I must either cut myself adrift from these social activities or take a partner who could attend to the practical side of the practice. It seemed to me a terrible shame to curb the continuous flow of offers for work and opportunities which must ultimately lead to some splendid clients. So I looked round for a partner. I knew that the man I wanted, and to whom I eventually attached myself, was a genius and socially utterly hopeless. I felt sorry for him and yet his work attracted me, in fact, fascinated me. He won many prizes with his beautiful designs, but he had not the faintest idea how to handle and land a client. During the first three years of our partnership he was delighted with the success that followed our joining forces. He appreciated my side of the partnership and I never let him think my duties were easy or that they came naturally to me. I drew up the terms of our agreement, which were on the equal share basis with certain mutual provisions. My expenses were to be met by the office, and any work he did after the usual hours was to be paid as overtime on an agreed basis. I tried to arrange a partnership that never treated either of us unfairly, just because we were mutually interested. It was recognised that my duties could not be limited by fixed hours, but there was no reason why my partner should do work late without the compensation we should have had to pay an assistant.

As years passed my partner unfortunately under-estimated my difficulties, he seemed unable to realise that I lost much pleasure in life by being never able to indulge in an undisturbed day's drawing. I had been educated to design and I was fond of planning; true I did not possess the talents in this direction that were his to command. But for all that I often longed to be able to sit down and peacefully devote hour after hour in solving the architectural problems that came into our office. He grew resentful of my apparent happy, contented outdoor life, and on many occasions words passed his lips that were not pleasant or flattering to hear. I had to frequently ask myself whether our successes were worth these constantly increasing unpleasant episodes. I can quite easily realise that everyone longs for a change, and it was this power to realise this desire that maintained our partnership to the end. But I would like to tell the inside clever men that the things they avoid when they shut themselves away from the outside world and concentrate on the pleasures of design are like one endless stream of petty irritations. I would like to ask them to consider and contemplate the possibility of their being constantly interrupted by calls from silly people, who do not think, who have dropped in to spend an hour in useless talk. I would like these clever draughtsmen to realise that the outside man can never tell anybody to go to a hot place. The outside partner must always be polite, he must have no desire to retaliate on people who have been unpleasant; in fact, he must always be on the best of terms with the people he likes least. The inside man spends his life in the pursuit of one interest which gives him unlimited pleasure. The outside man must appear to be pleased and interested under every circumstance. He must be charming to all. He is paid to be so. I personally have no doubt about which is the more difficult duty. And only because I possessed an unlimited patience and a very keen appreciation for my partner's abilities was our partnership the success it has been, because he, poor man, did not know the meaning of the words tact and consideration.—Yours, etc. CITY ARCHITECT.

The Larger Vision in Architectural Design.

By Percy L. Marks, F.J.I.

Even a very brief historical survey of architectural design reveals many interesting features, many pregnant examples for the enlightenment of modern criticism upon the subject of comparative values of portfolioed architecture.

What may be understood as being implied by the phrase "larger vision"? This, and nothing more—the expression of lofty ideals in the current architecture of any day.

Taking modern work *en masse*, present-day procedure is altogether too eclectic to provide valuable bases of criticism or of consideration, the radical idea being to design in a "Style" rather than to try and give expression to the nobility of a thought. It is not conceivable that at any stage of the world's existence yet to be will the nineteenth century or the first quarter of the twentieth century give any such satisfactory basis as provided by history from the days of the Egyptians down to and including the eighteenth century of this era.

One of the most ancient of existent races—if not the most ancient—(I refer to the Jewish) is unproductive of modern art of any useful data in the "larger vision"; indeed, it scarcely seems proper to talk of Jewish art; the Tabernacle of the Covenant was in the nature of cabinet work, and rather crude and barbarian at that, according to modern ideas. Solomon's Temple was of Tyrian design, so far as it was unshackled by King David's plans; of its successor, Zerubbabel's Temple, we have altogether too vague a notion, and Herod's magnificent temple, which lasted into the first century of this era, possessed strong Roman elements.

But leaving Judæa, we find in Egypt, whose art was certainly antecedent to the Jewish period, monuments which to this very day impress us with their sublime originality of conception and treatment. The pyramids, with their vision of eternity; the Sphinx, redolent of unsolved psychological dubieties; Karnak and Luxor, Edfou and Philao—each bearing its own message, either of divine supremacy or divine secrecy—may we say rather, of mystery? I exclude from consideration the tombs of the kings and nobles, for these had an individual significance in general unlike the larger significance of the pyramid tombs, and such narrower conception could not fail to hold the larger vision within bounds.

Assyrian art excelled in the expression of mysticism of a different type to that expressed by Egyptian art; if the smile—or perhaps I should say, the semi-smile—of the Sphinx is an unsolved riddle, far more remote from solution seems the serene placidity of the smile of the anthropomorphic giants of Khorsabad and Nimroud, and the mysterious bas-reliefs of winged gods, with which we are now familiarised.

Greece, of the period of Athenian supremacy, provides its own vision, as distinct from that of Egypt or Assyria as it is from Rome and from succeeding civilisations. Who would deny to Greece her polytheistic vision of dilettanteism, far, very far removed from the more practical and even cynical tendencies of Imperial Rome? It is true that the empire of the Seven Hills was pagan, but it was a paganism which was less purely pagan than in Greece, due partially, it may be, to the less insular life of the legions of Rome, and partly also to the tenets of Jesus of Nazareth and his followers, which began to blossom almost coincidently with the foundation of the Empire. Not that Roman art showed this influence directly, but the leaven was working which was to ferment so powerfully as the centuries progressed. But this result is at once to be noticed, that the cold purity of Athenian art gave place to the warmer and more human touch of Roman art, though with a diminution of the *flamma divina*.

What message does ancient China yield? I fear me, none; I know of no useful message we can extract, or any large vision from the celestial empire, whose name so contradicts its art. But the land of Hindustan individualised itself in its tribute of regal splendour and Buddhistic transcendentalism. I suppose we are too practical in these days; but, whatever the explanation, we could not hope to emulate the mystic grandeurs of Egypt, Assyria and India. Thibet is at present too little known to admit of consideration.

An interesting phase of art is encountered where East meets West in Byzantium, and there—just to take the most famous example—in Sancta Sophia, the wisdom of the East blends with the progress of the West in most characteristic and harmonious fashion.

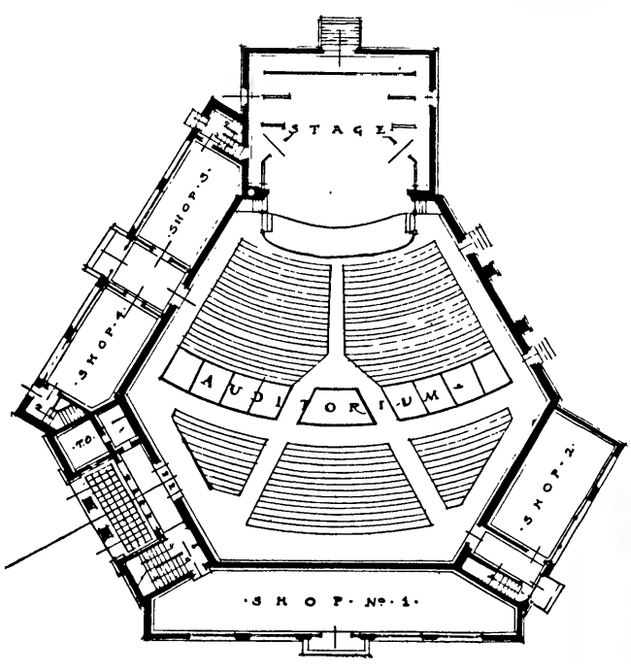
If the roc's egg was regarded as of mystic power, or, at least, of mystic significance, we find this reflected in the use of the domes of the Orient, which subsequently spread their influence to Venice and the West in general.

As Western paganism decreased in the spread of the light of Christian revelation, so did the spirit of architecture reveal itself under a new guise, and, through the various phases of Saxon, Romanesque, Lombardic and Gothic art, it carried forward the banner of faith revealed in the work of men's hands and brains. Certain buildings stand forth prominently as bearing the message of the larger vision—the Taj Mahal, Sancca Sophia, San Marco, the Parthenon (from the pagan standpoint), and the cathedrals of France, Italy and England.

And, yes! I think there is one modern London building which merits inclusion in this brief survey, and that is Westminster Cathedral, whose merits grow upon one with ever-increasing vigour and intensity.

For the most part, then, it would seem as if the larger vision is discoverable in works of ecclesiastical art, and is this to be wondered at? Surely not, for domestic art has an individualism almost selfish in its conception; commercial art is to bound up with the lower claims of money-getting, and municipal art with the strife of parties, whereas the art of religion bears on its face the ennobling character of revelation as exhibited to the various sects who, though they may contend amongst themselves, yet all have, at least, one central idea in common, which is to raise to the honour and glory of their God temples wherein may be conducted the worship of the Universal Father.

THE CAROLINA THEATRE, PINEHURST, NORTH CAROLINA. AYMAR EMBURY II., Architect.



The Carolina Theatre.

The "Architectural Record" for June contains some very interesting account of the work being done in what are known as the Sand Hills of North Carolina, a district which has little good soil with a natural forest of pine and scrub oak now largely cut down for lumber. After the War of Seccession the whole district remained in an impoverished condition, from which it is now slowly emerging. Mr. Aymar Embury has carried out a long series of works in this forgotten district, where some contractors had never built from plans and blue prints were unknown. Mr. Embury's work has met with full appreciation locally, the Mayor of Southern Pines even proposing that the town should permit no buildings save those which were designed or approved by Mr. Embury. In New York Mr. Embury has a reputation for good domestic work; in North Carolina he is recognised as a good architect for every type of building.

The article deals with and gives illustrations of a series of buildings including the Mid Pines Country Club at Knollwood, a simple colonial type of a long extended building, the wings of which are inclined at an angle to the centre block. The Office Building of the Fruit Growers' Association at Aberdeen, the Aberdeen Public School, the Southern Pines Public School, the Highland Pines Inn, Southern Pines, a series of delightful country houses, and what is even more interesting, the Carolina Theatre at Pinehurst, an admirable little building which we illustrate, forming an irregular hexagon surrounded on four sides by a shallow range of shops. This little building is well and pleasantly treated and forms a good example of what is possible in the nature of simple and restrained design.

SIDE OF THEATRE.

General News.

ARLEY.—Warwickshire county architect has prepared plans for a school of 400 at a site at Gun Hill.

BLACKBURN.—The Lancashire County Council are purchasing Withenell Hall, which is five miles south-west of Blackburn, for adaptation as a hospital for cases of tuberculosis.

CHELMSFORD.—Plans have been prepared for the erection of 50 houses on the Boarded Barns Estate.—A block plan for 64 houses around "The Green" with different elevations to give variety, provides for houses at from £375 to £470 each.—Plans passed: 6 houses, Bishops Road, for Messrs Golding & Hadler; 8 shops and flats, Rainsford Road, forMr. F. Collins; 4 shops and 2 flats, Moulsham Street, for Mr. E. C. Ashton.

CHIPSTONE COLLIERY.—The tender of Messrs. A. Eastwood & Sons, of Warsop, £16,750, has been accepted by the Notts Education Committee for the erection of a school for 728 children.

CLIFFORD.—The Warwickshire County Council propose to widen and improve Clifford Chambers bridge at a cost of £10,000.

GLASGOW.—For new buildings for the corporation in Trongate the following tenders are recommended:—Excavator, mason and brick work, Messrs. Jackson, Brown & Co., £15,651 7s. 6d.; carpenter and joiner work, Messrs. John McDonald (contractors), Ltd., £7,436 6s. 5d.; plumber work, Messrs. J. Pattison & Co., Ltd., £1,633 12s. 5d.; cast iron work, Messrs. M'Culloch & Co., £1,688 7s. 8d.; rock-asphalt work, The Scottish Speedwell Co., £322 16s.

GUNTHORPE.—The Minister of Transport has approved the scheme of the Notts County Council for the construction of a bridge across the river Trent at the cost of £90,000.

LANCASHIRE.—Lancashire County Council propose to appoint a sub-committee to confer with the Town Council with regard to the provision of a secondary school to serve Chadderton and the neighbouring areas.

LUTON.—The Borough Engineer has prepared plans for the conversion of the Plait Halls into a covered market, and the Town Council have authorised him to invite prices for the requisite ironwork and to obtain tenders for the constructional work necessary for the adaptation of the Halls.

MANSFIELD WOODHOUSE.—General improvements have been authorised at the Church of England school to increase the accommodation from 498 to 546.

NEWARK.—The governors of the Girls' High School are considering plans which will provide for a new central hall and various improvements at a cost estimated at £3,000.

NEWPORT (I.O.W.).—After conference with the Board of Trade the corporation has authorised Messrs. Orr, Watt & Co. to proceed with the construction of the new swing bridge at the quay.

NOTTS.—The Board of Control have asked the County Council to prepare a scheme for an institution for mental defectives to accommodate 400 or 500.—The County Council propose to provide a muniment room at the Shire Hall by adapting the Servants' Hall at the old judges' lodgings. The county architect has reported that the room is reasonably protected from exterior fire, being built on brick arches and ceiled with steel girders on which rest thick concrete slabs.—The County Council are to raise a loan of £6,000 for buildings at the Ransom Sanatorium.—The annexe to the Shire Hall is to be adapted at a cost of £2,200 for county offices.

SELSTON.—The Notts Education Committee have accepted the tender of Messrs. E. Allcock & Sons, £2,008, to erect additional accommodation for 40 scholars at the Bagthorpe School.—An iron building for 60 scholars is to be erected at the Portland Row Council School.

SWINTON.—A new secondary school is proposed by the Lancashire County Council for Swinton, Pendlebury, and Worsley.

THORESBY.—The L. & N.E.R. are to construct a new railway to New Colliery, and the proposal involves the construction of a bridge on the Ollerton-Mansfield main road.

WARWICK.—A new handicraft centre is to be erected at the Collin End School.

WILNCOTE.—A mining school at a cost of £3,000 is to be built on a site between Wilncote and Two Gate, Warwickshire, in connection with the Miners' Welfare Fund.

WORKSOP.—The tender of Messrs. Richmond & Sons, £7,546, has been accepted by the Notts Education Committee for the erection of first section of a school for 384 at Haggonfields.—Plans have been passed for the erection of the remaining sections of Netherfield Lane School to accommodate 440; and a school for 568 in Priors Wells Road.

WYKEN GRANGE.—Warwick County Council have accepted the tender of Mr. J. G. Gray, £14,488, for the erection of a school for 580.

Trade Notes.

Asphalt Work at Wembley.

Many architects who have visited the British Empire Exhibition at Wembley have had an opportunity of inspecting the details in connection with the whole construction of the Exhibition. They will have been able to form an opinion on the practical utility of many materials. Amongst these the tremendous practical tests to which asphalt work has been subjected will most certainly have impressed them very favourably. In the Palace of Engineering the visitor is faced with exhibits which must weigh many tons. The thought of how all these bulky pieces have been brought into position and how they will be removed must be in the minds of many. If they were to examine the yard of the administrative buildings which is paved with "Lithocrete" mastic asphalt, a material prepared by the Limmer & Trinidad Lake Asphalt Co., Ltd., they would see for themselves the great value of this material. This yard is continuously under traffic bringing supplies to the main depot of the Exhibition caterers. The receiving station of the London Wholesale Dairy Company, where the milk for use in the Exhibition is brought by rail, has a platform of Lithocrete mastic asphalt, which material is also used on the loading platforms of many main line stations. The material is specially manufactured so as to permit extremely rough usage. The company lined the reservoir supplying the Exhibition with water. The whole of this work was completed in fourteen days and includes a considerable area of vertical asphalt work to the walls and columns. An area of upwards of four acres of mastic asphalt prepared by the Limmer & Trindidad Lake Asphalt Co., Ltd., has been laid in the Exhibition grounds for a variety of purposes. The Fine Arts Building is safeguarded from all damp by the use of the company's asphalt. Many cafés throughout the Exhibition have their flooring of mastic asphalt which was laid on the rough concrete and is half an inch thick, which specification satisfies all requirements.

Messrs. A. Clarkson & Co., Ltd., manufacturing opticians, of 338, High Holborn, W.C.1, send us their latest illustrated list of surveying and drawing instruments, showing their own make and other makers' examples, with prices of theodolites, dumpy levels, Clarkson's drainage level, telescopic levelling staves, land chains, levels, sextants, folding rules, etc. A handsome present would be their leather covered pocket case, containing a comprehensive set of drawing instruments, at a complete cost of £4 15s., or the smaller case, wallet size, £2 16s. The list which consists of 34 pages with cover, is fully illustrated and priced throughout.

Messrs. Joseph Kaye & Sons, of the Lock Works, Leeds, inform us that they have obtained from the Great Northern Section of the L. & N.E. Rly. Co. the contract for twelve months for Kaye's patent railway carriage door locks and safety catches and handles, and that they have received orders to supply 4,292 to be fitted to 29 trains consisting of 290 carriages, now building for the Great Eastern Section of that railway. Messrs. Kaye are receiving large orders also from the London, Midland & Scottish Railway Co.

The Anglo-Galvanising Co., Ltd., of Abbey House, Victoria Street, Westminster, have entered into an agreement with the Expanded Metal Co., Ltd., of West Hartlepool, to erect plant in their works for working under licence the Anglo process of electro cold galvanising. The Anglo Co., owing to their increasing business in the London area, have transferred their London works from Brentford to larger premises at the Imperial Works, St. Mary's Road, Plaistow, E.

Messrs. Vickers, Ltd., have just installed at their Barrow-in-Furness Works a new open hearth Siemens Steel Furnace of the very latest type built and designed by Wincott's of Sheffield. The capacity is between 10 and 20 tons per heat, and it is now possible to get a total output from the steel foundries at the Vickers' Barrow works up to 300 tons of castings per week, ranging from a few pounds weight each to a 20-ton casting.

Castings to Admiralty, Lloyd's, and Board of Trade requirements, such as ship's structural work, can now be made at the Vickers' Barrow works up to the above figures.

In addition, it is anticipated that a good proportion of the output will be absorbed for commercial castings.

The first heat was tapped from this furnace on July 18, 1924, with very successful results, as determined from the test figures and analyses, and it will now be possible for Messrs. Vickers, Ltd., to give special attention to inquiries for steel castings of every description up to 20 tons weight.

Boyle's latest patent "Air-Pump" ventilators have been applied to Hornsey Cottage Hospital, London, N. Supplied by Messrs. Robert Boyle & Son, ventilating engineers, Holborn Viaduct, London.

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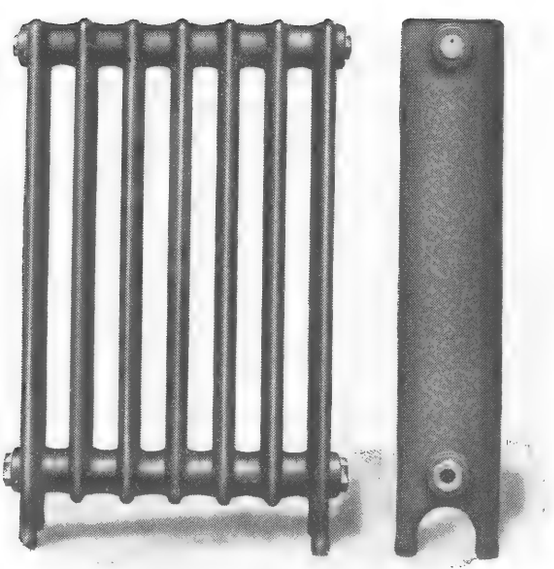

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Liverpool Cathedral.

Heating Apparatus.

The arrangements for heating the Cathedral, being on an entirely new system, require special reference.

Very early in the history of the building of the Cathedral, before the principal foundations were laid, the question of heating was carefully considered, so that preparation might be made as the work proceeded, and subsequent cutting and disfigurement of the structure avoided. It was then decided to adopt a combined system of warm air and hot water with an accelerated circulation, similar to the heating system in Westminster Abbey, St. Paul's Cathedral, and many other large churches. With this system the heat lost through the windows, walls, etc., is made up from hot-water pipes and radiators under the windows and any other place where heat is rapidly lost from the building. The balance of the heat required and the heating of the air for ventilation is provided by warm air stoves. These stoves consist essentially of a wrought-iron box enclosed in a brickwork box, with an annular air space between the two. The wrought-iron box encloses a furnace and the air to be heated is drawn or blown through the annular space.

It was arranged to heat the Lady Chapel, Vestries, Ambulatory and Chapter House by hot water only, the radiators being specially designed by the architect to harmonise with the building. That portion of the apparatus in the Lady Chapel and adjoining vestries has been in use since the opening of that part of the building.

In the year 1920 the engineers, G. N. Haden & Sons, Ltd., having developed and patented a system of heating by means of a warm floor, submitted an alternative scheme for the main building, which was adopted by the Committee after very careful consideration.

The method of heating a building by warming the floor was used by the Romans, as may be seen in the Baths at Bath, and in the Baths at Caracale at Rome. Here the hot gases and products of combustion from a fire outside the room passed under the floor on their way to a chimney stack.

In the Cathedral almost the entire floor space consists of a double floor, enclosing a system of shallow ducts. The warmed air from stoves, similar to those above mentioned, is circulated through these ducts by an electrically-driven centrifugal fan. The system of ducts is a closed one and the same air is circulated continually through the system, so that there will be no accumulating deposit of dust to clean out. There are no steam or water pipes to require attention, nor is there any buried metal work to deteriorate in course of time.

Under this arrangement the floor of the Cathedral itself becomes an immense radiator, the surface of which is so large compared to that of hot water radiation that the temperature required at its surface is considerably below blood temperature, and for this reason the floor does not feel warm to the feet. The tempering of the marble floor will, however, add to the comfort of the congregation, and the heating surface being at a very low temperature there will be no drying of the air. The heat is evenly distributed and down draughts are prevented because the heating surface is the whole floor area of the Choir, Aisles and Transepts.

A hot-water radiator is provided at the sill of the large East Window behind the Reredos, and similar provision is made at the North Transept window to counteract the great loss of heat through these large areas of glass. There are radiators also in the Triforium to counteract the loss of heat through the Clerestorey windows.

The heating chamber is situated under the centre of the Cathedral, with an approach from the roadway near the South Transept for fuel. The floor heating apparatus, hot-water boilers, air circulating and ventilating fans are all arranged in the chamber, and provision is made for the apparatus that will be required for heating the Nave, when that part of the Cathedral is built, the ducts being carried through the temporary wall ready for extension.

The air which warms the floor has no access to the air in the building; special means are therefore provided for the admission of fresh air for ventilation. This air is warmed to the temperature of the inside of the building by a warm air stove, and delivered overhead by an electrically-driven centrifugal fan. Extraction of air from floor level is effected by a similar fan discharging into the churchyard.

This system could not have been installed without the cordial co-operation of the architect, who has given the engineers every assistance.

Hydrant Service.—On account of the height of the Cathedral and the elevation of the site the pressure on the water mains is not sufficient for hydrant service. A powerful electrically-driven pump has therefore been provided in the basement, and there is a tank of 20,000 gallons capacity, from which the pump takes its supply. This is sufficient to supply two hydrants for half an hour. Hydrants are fitted in suitable positions in the Cathedral, and the pump can be started electrically from the hydrant boxes. The pump will be worked periodically to ensure that it is in good working order.

The Business Side of Wembley.

The "Investor's Chronicle" has just completed a series of supplements dealing with the business side of the British Empire Exhibition, and these the official publishers are now issuing as a guide to Wembley's business features. Our contemporary, in connection with this work, has been brought into touch with the heads of the leading industrial firms exhibiting, and it is interesting to have their assurance that two at least of the main purposes of the Exhibition are being well served. Almost all the home engineering exhibitors have received contracts, not only on home account, but for the Dominions and other Colonies. The "Chronicle" states that home exhibitors generally are well satisfied that the outlay they have to bear for upkeep of their stands, although in many cases appreciable, is fully justified by the volume of increased business they are securing. From the authorities in the Colonial buildings the "Chronicle" learns that there has been an appreciable quickening of emigration from the home country, and that a very good class of emigrant is being secured.

The "Investor's Chronicle's" "Business Guide to Wembley" is published at 1s. net, and may be obtained from its offices (8 Draper's Gardens, E.C.2) or at all the official publisher's kiosks at the Exhibition.

A Well Illuminated Window.

In a large number of electrically lighted show windows to-day waste of light is a common defect. If the cause is investigated it will be found that, probably, too many lights have been installed in incorrect positions in shades and reflecting equipment of improper design. The result is that half the light paid for is either projected through the window and illuminates the pavement, or is abundant in portions of the window where it is not required. The illumination upon the goods in a show window should be projected from above and from the front of the window. If this light is produced by the correct type of equipment applied to a scientifically designed installation, glare and harsh shadows are entirely absent and, consequently, the goods can be viewed in comfort. These features are embodied in the installation recently produced at the premises of Messrs. Smith & Harvey, tailors, Butter Market, Ipswich. The installation comprises a number of "Gecoray" reflectors of the "Meteor" type, equipped with 60 watt Osram gasfilled lamps The installation work was carried out by Messrs. Wood & Co. Northgate Street, Ipswich.

Mr. Wilfrid Travers, O.B.E., F.R.I.B.A., has removed his offices from 1 Featherstone Buildings, W.C.1, to 36 Furnival Street, Holborn, E.C.4.

Mr. Albert J. Shingleton, proprietor of the well-known Kensington Blind Works, has removed from 118 High Street to 160 Earl's Court Road, Kensington, London, S.W.5, to which address all communications should be made.

ELLESMERE PORT AND WHITBY.—The Urban District Council are preparing preliminaries for a town planning scheme.—Subsidies are proposed for a further fifty houses.—Three acres of land at Stud Farm are to be purchased for a housing scheme.

FULHAM.—The Borough Council are considering the provision of a new chapel at the North Sheen cemetery. A special committee are dealing with the proposed extension of the town hall.

CHISWICK.—The tender of Messrs. G. Godson & Sons, Ltd., of Kilburn, is recommended for acceptance for the construction of the new secondary school for boys at Chiswick.

HULL.—The City Council had eleven tenders for the construction of the Ferens art gallery and accepted that of Messrs. George H. Panton & Son, Ltd., £53,980. If this firm do not accept, the tender is to go to Messrs. E. Quibell & Son, Ltd. The work is to be completed within 24 months. The architects are Messrs. Cooke & Davies.

LEEDS.—The renovation of the old hall at the Killingbeck sanatorium and the provision of additional acommodation is proposed by the Corporation at a cost of £2,566.—The tender of Mr. J. T. Wright (£10,186) has been accepted for alteration at 40 Port Lane, for additional office accommodation.

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SIDEBOARD, GOVERNOR'S HOUSE, JERUSALEM.

Jerusalem.*

This volume contains an interesting account of what has been attempted and carried out by the Pro-Jerusalem Society since the termination of the military occupation of the city. The objects of the Society are defined as being: (1) The protection of and the addition to the amenities of Jerusalem and district. (2) The provision of parks, gardens and open spaces. (3) The establishment of museums, art galleries, exhibitions, and musical and dramatic centres. (4) The protection and preservation of antiquities. (5) The encouragement of arts, handicrafts and industries. (6) The administration of any immovable property acquired by or entrusted to the Society. (7) Co-operation with the Departments of Education, Agriculture, Public Health and Public Works so far as may be in harmony

* "Jerusalem, 1920-1922. Being the Records of the Pro-Jerusalem Council during the First Two Years of the Civil Administration." Edited for the Society by C. R. Ashbee, M.A., with a Preface by Sir Ronald Storrs, Governor of Jerusalem. (London: John Murray. £2 2s. net.)

DINING ROOM, GOVERNOR'S HOUSE, JERUSALEM.

DRAWING ROOM, GOVERNOR'S HOUSE, JERUSALEM.

with the objects of the Society. Mr. Ashbee has held the appointment of Civic Adviser up to 1922 and was then succeeded by Mr. A. C. Holliday, the present Civic Adviser.

Jerusalem has changed hands more than forty times since the time of David, and has often been sacked and destroyed by invading armies. It remains a city of great traditions, a prize coveted by Jews, Christians and Moslems in turn, without being distinguished by buildings of the first architectural importance, for, with the exception of the Holy Sepulchre, that curious agglomeration of churches used by the differing sects of Christians, it contains little of purely architectural interest, certainly nothing which suggests inspiration from its fine natural features. The work of the Society has been on the one hand to promote systematic and careful repair of the walls and gateways of the Citadel, and by the promotion of ordinances dealing with materials and advertisements to bring order out of the chaos inseparable from a city which has for centuries been in Turkish hands. Secondly, the Society has been instrumental in the promotion of measures to provide for the expansion of the city and the preservation of historic sites, while, on the outer edges of the districts so dealt with, sites have been allotted for garden cities which are contemplated. The chief of these, the Talpioth Garden City, lies to the south of Jerusalem and will occupy a site of 1,068,650 square metres, and is to contain provision for houses, a town hall, baths, theatre, an academy, synagogue and hospital, the planning and scope of which are symbolic of Zionist activities which are modifying the modern development of Jerusalem. The Janjireh Garden City is a less ambitious project, the total area of which is only 120,000 square metres and one which will prove more feasible because of the English, Greek and Moslem developments of the south-western area of the city. Two other smaller enterprises are the Boneh Bayit Garden City, planned on the road to Ain Karem, and Antimus Porah, situated on the Jaffa road. All of the foregoing projects must necessarily largely depend on their realisation on the practical vitality of the Zionist movement as an active political force, for Palestine, unlike Egypt, is not a potentially wealthy land.

The Society has encouraged the three industries of weaving, ceramics and glass making. In the first industry the inability of the administration to carry out the Society's plan for the proposed Palestine School of Weaving determined it to cancel its weaving apprenticeship contracts and to arrange for a certain number of shops to be leased direct to the master weavers, retaining the looms and plant for a future school of weaving, placing out the remaining apprentices. In ceramic work the Society, with the help of the Department of Education, have done a good deal of work in assisting the Armenian and Moslem industry of painted tile work for the Dome of the Rock. The names of the streets as decided on have been painted in ceramic ware. The method adopted for apprenticeship has been much the same as that adopted in the case of the Jerusalem looms. The third craft, that of the Hebron glass blowers, has proved more difficult to organise and expand and its future is still an uncertain one, the problem of fuel and its transportation proving a difficulty. The Society has also organised exhibitions in the Citadel dealing with town planning, with ancient Moslem art and with the arts and crafts of Palestine, which have proved of considerable interest and usefulness.

A description, with illustrations, is given by Mr. Ashbee of some very interesting work he has carried out in furnishing and decorating Government House, which is noteworthy as showing what can be done by local labour and, we may add, of interest to architects as showing Mr. Ashbee's talent in the field of eclectic design. The trades employed were masons, ceramic painters and tile makers, blacksmiths, cabinet makers and carvers, weavers and glass blowers, belonging to many different races—English, French, Germans, Arabs, Armenians, Syrians, Poles and Russians. Of Mr. Ashbee's four foremen one talked Greek, Arabic and French; another Arabic, French and Armenian; the third, German and Arabic; and the fourth, Arabic and Turkish.

We may conceive, under such circumstances, that Mr. Ashbee had his hands full in carrying out work the cost of which was only some £E.3,000, but he is to be commended for taking immense trouble instead of adopting the simpler plan of importing work from England.

The most interesting of the various essays in the book is that which describes the tenure of the Christian Communities in the Holy Sepulchre at different ages by Mr. H. C. Luke, the Assistant Governor of Jerusalem, which is illustrated by a coloured plan showing the various ownerships into which this astounding mass of old buildings is divided, ownership disputes over which have in the past constantly caused grave diplomatic disputes.

Apart from any political considerations, architects must wish that the Zionist movement may be sufficiently strong to enable some of the more ambitious schemes to meet with full realisation. The great project of a Jewish University, which we illustrated in our pages some time ago, is an instance in point, and its realisation on the lines indicated would prove an inspiration in a land whose architectural monuments are few and far between. If Palestine is to be made a great country it can only be through Zionist activities, though we should be far from denying that the land whose people are not ambitious to make history may yet be happier than many of its neighbours.

The Pro-Jerusalem Society is exhibiting in the Palestine Pavilion of the British Empire Exhibition the well-known Models of the Tabernacles in the Wilderness, of the Temples of Solomon and of Herod, and of the existing Dome of the Rock and al-Aqsa Mosques in the Temple area. Explanatory addresses are given several times a day illustrative of Old and New Testament history.

Specimens of Jerusalem glazed tiles and pottery and of glass work made in the traditional manner at Hebron are on sale close by.

The Triangular Construction Co., Ltd.

The company, though only five years of age, celebrated its first official outing on July 28, some 150 members of the staff journeying by road to Bognor. Unfortunately the weather was anything but pleasant, but in spite of this the general opinion of all those present was that a very pleasant day had been spent. These outings have a very beneficial effect on all parties. Directors have an opportunity of speaking to and noticing the youngest members of the staff, and in this way youth can be brought to appreciate the personal side of their employers. It is recognised throughout the whole business world that the personal touch is of great importance and in no way lightly to be laid on one side or ignored. We congratulate the Triangular Construction Co., Ltd., on the occasion of their first of what we sincerely hope will be a great number of annual outings.

WELNEY.—Norfolk County Council propose the construction of a bridge across the river Ouse to replace the suspension bridge.

Our Illustrations.

WINTER GARDENS, SOUTHEND-ON-SEA. D. N. Martin-Kaye, Architect.

HOUSE, WAREHAM ROAD, CROYDON. Nicholls & Hughes, Architects.

Notes and Comments.

Canada's Help in Housing.

It is stated that Canada can send over hundreds of thousands of timber-framed houses which will only need putting together on this side of the water, and no one who has lived in America will doubt that such houses are in every way equal to those we are used to here. The bye-laws of every district should be amended to allow of the erection of such buildings with a reasonable provision for space round them, as they offer a reasonable solution of many of our difficulties. Years ago we remember in Western Canada when labour was enormously expensive as compared with prices here. The cost of such houses was about one-third of what we were paying for similar structures in brick, and though this result was largely helped by the cheap local supply of timber, it was in part due to the scientific method of the employment of a suitable material, which gives exactly as much opportunity for design as do our ordinary methods here. Instead of negotiating with the Unions it would be as well if our authorities had tried what they could do without their help.

A Wakefield Experiment.

The Wakefield Corporation is making a most interesting experiment in building which aims at the substitution of oak framing filled in with stone slabs for brickwork. The Wakefield Corporation have completed two houses and contracted for twenty more. This method of building is, of course, a reversion to an old type, except that lath and plaster work or brickwork are abandoned in favour of sawn stone slabs. The slabs are backed with a bituminous compound which renders the interior completely watertight and serves as an adhesive lining for any interior finish, whether plaster or boarding, the latter having the advantage of obviating delay. The foundations are of concrete and the chimney blocks of concrete or brickwork. The Wakefield Corporation are erecting on the same estate 200 concrete houses carried out on a well-known system, so that they are obtaining actual experience in the efficacy of new methods.

We hope that the very interesting experiment they are making will serve as a stimulus elsewhere, as it is only by such experiments that trustworthy experience as regards time and cost can be obtained.

Labour and Housing.

The "Daily Herald" is obviously very angry that alternative methods of building dispensing with bricklaying should be discussed and throws ridicule on Lord Weir's proposals. It asks whether Lord Weir would like to live in a steel house, but overlooks the important consideration that he does not want State-aid in meeting his requirements. It seems to us absurd to assume that the State should not only provide housing, but provide it in exactly the form which people might prefer. Apart from this, we doubt if the working man who wants a house would care whether it were built of brick, stone, steel sheets or timber provided it contained certain necessary accommodation. Lord Weir's scheme, like others, can be wrongly described, and prejudice may be roused by error. We should all object to living in a building of which the floors, ceilings and inner walls were formed of steel sheets, but all we understand Lord Weir to mean is that houses should be built with a wooden framework, the outer wall being replaced by steel sheeting and the inner lining formed of lath and plaster or boarding and the roof of some form of asbestos covering. We should greatly prefer brickwork, but the bricklayers union are making brickwork a luxury because output is about one-third what it should be, which is equivalent to trebling its charge. Bricklayers will only have themselves to thank if they are entirely dispensed with in the building operations of the future, for the strangle-hold they are exercising on building cannot be allowed to go on indefinitely.

The Shortage of Houses: Its Causes and Remedies.

Mr. William Woodward has sent us a pamphlet under the above title, with the substance of which we are in entire agreement. He gives letters written to the Minister of Labour detailing useful work which might be undertaken by the Government to reduce unemployment, together with the official replies thereto, which, as usual with such documents, do not prove helpful. Mr. Woodward says :—

The Remedies.—I am quite aware that, with the present Government in power, no immediate improvement as regards housing is likely to take place. Mr. Shaw, the Minister of Labour, is a member of the Socialist Labour Party, and Socialism is "an international parasite which has fastened itself upon Trade Unionism." We must be able to get back to the old rule of a day's pay for a day's work, but that will require the presence in power of a *Mussolini*. All Trade Union rules for the restriction of output must be made illegal, and thus stable political conditions could be secured; and the investment of capital in industrial enterprises be at once set going. The Government could facilitate the borrowing of money by Building Societies, who could, with all their experience, set to work the machinery which would encourage the building of houses by private enterprise, and very soon supply the undoubted want.

The first thing to be done, however, is to secure the repeal of the Trade Disputes Act, 1906. Paragraph one is delightful in its innocence. It runs: "An act done in pursuance of an agreement or combination by two or more persons shall, if done in contemplation or furtherance of a trade dispute, not be actionable unless the act, if done without any such agreement or combination, would be actionable."

Paragraph 2 is termed "Peaceful picketing," and we all know now that that has enabled tyranny of the worst description to be exercised without any real interference on the part of those whose duties should have led them to stop the outrages not only on the workmen who desired to work, but on their wives and children. The paragraph runs as follows :—

2.—(1) "It shall be lawful for one or more persons, acting on their own behalf or on behalf of a Trade Union or of an individual employer or firm in contemplation or furtherance of a trade dispute, to attend at or near a house or place where a person resides or works or carries on business or happens to be, if they so attend merely for the purpose of peacefully obtaining or communicating information, or of peacefully persuading any person to work or abstain from working."

Paragraphs 3 and 4 deserve also to be brought prominently before the public. They run as follows :—

3.—"An act done by a person in contemplation or furtherance of a trade dispute shall not be actionable on the ground only that it induces some other person to break a contract of employment, or that it is an interference with the trade, business, or employment of some other person, or with the right of some other person to dispose of his capital or his labour as he wills."

4.—(1) "An action against a Trade Uuion, whether of workmen or masters, or against any members or officials thereof on behalf of themselves and all other members of the Trade Union in respect of any tortious act alleged to have been committed by or on behalf of the Trade Union, shall not be entertained by any court."

Following the repeal of the above-named Act, all Trade Union leaders and shop stewards should, after having their wings closely clipped, be sent back to their legitimate employment.

"Ca canny" must cease, in all trades, and men left to work as they like, and *when* they like.

Dilution in all trades must commence at once. This is easy to accomplish in *bricklaying*, because delay in that trade keeps idle innumerable other trades and industries. It should be well borne in mind that the completion of the carcase of a building puts into immediate employment industries for the supply of carpets, blinds, curtains, china, plate, furniture, bedding and all the other items required to equip a structure ready for occupation. A few competent bricklayers could level up, plumb angles, and turn arches in houses, to be followed by thousands of ex-Service men, and others, who could complete the brickwork whilst trade unionists are debating how much more money they

can get for less work, a procedure which receives the benign blessing of a Minister of Labour.

The whole of the Government staffs dealing with housing should be paid off, the construction and character of the houses being left to the District Surveyors in London and to the Local Surveyors in the country. This course would get rid of delay after delay and of the fads and fancies of Government officials. The buildings in London are all carefully supervised by the District Surveyors, who have received certificates of competency to act as such by the Royal Institute of British Architects. It will be impossible to get houses erected to be let or sold at economic prices unless the work is left entirely to *private enterprise*; *then* we might secure good planning and good architecture. To-day a house erected under the auspices of Whitehall is at once recognised by its ugliness; its waste of money in high-pitches roofs, and other little expensive bits of "arty-arty"; and more particularly, by the want of thought in planting them "higgledy-piggledy" with windows looking into each other in entire disregard of that decency which accompanies all good town planning.

General Conclusions.—A remarkable speech was made in the House of Lords on Monday, July 7, 1924, by the Earl of Midleton, which we should all read, mark, learn and inwardly digest. I may make one or two quotations which I think are very apropos to the building disputes to-day. "In Germany, in December last, out of 8,000,000 workers, 1,300,000 were unemployed. In May last the figure was 475,000." The figure to-day for "our unemployed is 1,100,000," and "Mr. Shaw had expressed the hope that by 1926 that figure might be reduced to 800,000."

With regard to the demand to reduce the hours of labour, Lord Midleton points out that "a reduction from 53 hours to 47 would be equal to the withdrawal of 1,250,000 workers, or an increase in the cost of production of £200,000,000."

The "dole," it is not too much to say, is the curse of this country, and until it is gradually abolished or reduced to, say, 5s. per week, we shall never get the men (those who are really able to work, I mean) to work, and this applies also to many women. On this question Lord Midleton quotes an instance where men had refused to work, and continued the dole. "Eighty men in a quarry had to suspend work owing to want of orders, and went on the dole. The quarry company then received an offer from a municipality to take 13,000 tons of limestone to be passed through a 5 inch ring. The men had been receiving 1s. 11d. for stone passing through an 8 inch ring, and they were offered 2s. 6d. for the special work for the municipality, and could have earned some 60s. a week. There was no question of profit, as the contract barely covered expenses of finding employment, but the men refused the work. Application was made to suspend the dole to these men, but the Ministry of Labour supported the men, and they got the dole."

On the important question of reduction in the hours of labour, I desire to insist, most firmly, that it is not only a question of the number of hours the men are supposed to work, but the number of hours they really do work. I thoroughly believe that if the trade union leaders agreed to, say, 35 hours per week, not more than 20 hours of *real honest labour* would be given, and that, too, at an agreed price per hour.

Lord Midleton has some very apt criticism for "bureaucracy" which was "sapping the independence of the people and throttling trade." The last return of the number of men and women in the Government staffs was just over 300,000, and I venture to assert that 200,000 of these "limpets" could be got rid of without the slightest injury to the real work of the country, but it wants a Mussolini to do it!

There can be little doubt that if the present Trade Union tyranny is allowed to continue in the building trade the confidence of the country in investing its money will be sapped, and when it resorts to personal violence, as it sometimes does, to those honest workers who only desire to be let alone, I appeal to the magistrates before whom these cases are brought, not to inflict *fines* only, which are at once paid out of Trade Union funds, but to send to hard labour those culprits who are paid by their "comrades" to disobey the law.

The Opposition in the House of Commons must cease to deal with the Labour Members as if they were the meek, law-abiding individuals they say they are. They are utterers of irrelevant platitudes and the Opposition must tackle the Government in its forthcoming Housing Bill *in detail* (just as I tackled Mr. Coppock). They must insist on absolute and definite undertakings as regards the money to be provided, where it is to come from, and how it is to be spent; and they must ensure that the means of increased "ca canny" and tyranny are drastically controlled. The Opposition must not be "kidded" (to use an expression well understood by the proletariat), and they should bear in mind when the "leaders" say—with regard to strikes—that they have been declared without the assent of the leaders, that the statement must be received with hundreds of grains of salt.

Unless the Opposition does its plain duty to those who sent them to Parliament, when discussing Mr. Wheatley's Bill, I believe that the words of Mr. S. T. Talbot, the Chairman of the Public Works Committee of the Birmingham City Council, will be proved to be prophetic, viz., that the Bill, if passed, will be the "Death knell to private enterprise" and "the most disastrous experiment in the Socialisation of Industry which the country has yet seen."

The Book which No One Writes.

We have books in plenty dealing with art and architecture, but there are gaps between the books written which are unfilled, and some of them are likely to remain unfilled for two reasons—the first, because the detailed study of the past tends to convert a would-be critic into an archæologist, and the second, because few of us deem it entirely prudent to tell the truth, the whole truth and nothing but the truth.

There are, it is true, wild men who, in architectural matters as in painting, profess doctrines which suggest anarchy rather than reasoned valuations, and who indulge in dogmas which convince a few peculiar people, and are regarded as freakish by the cultivated, but these are only the effervescence on the surface of the sea of general criticism, and are not to be regarded as being likely to move opinion as a whole.

The book that has never been written and probably never will be written requires that its author shall have wide knowledge, liberal appreciation of differing phases of art, cultivated and critical judgment, and at the same time a fearless regard for truth even when its expression might be regarded as heretical.

Such a writer would review past historical architecture, and not fear to express conclusions which might revolutionise accepted standards. His work would dethrone many idols, but what remained would seem infinitely more worthy of admiration, as we should recognise the true altitude of achievement. Then again, such a survey as we are outlining would also make manifest the fact that past ages transcended the present not so much because of the greater merit of more ambitious creations, but from the fact that traditional artistic expression crept into common everyday building through the medium of the craftsmanship of the time. The writer would not be afraid of emphasising the great and kindly effect of time itself on our past building, which has softened outlines which must at the time of building have been both crude and hard.

We should be left with a purged sanctuary of beliefs stripped of the false halo given by doctrines founded in unconscious insincerity and custom, and such an analysis might help us to form a much clearer idea of the real functions of architectural design by giving us a more accurate standard.

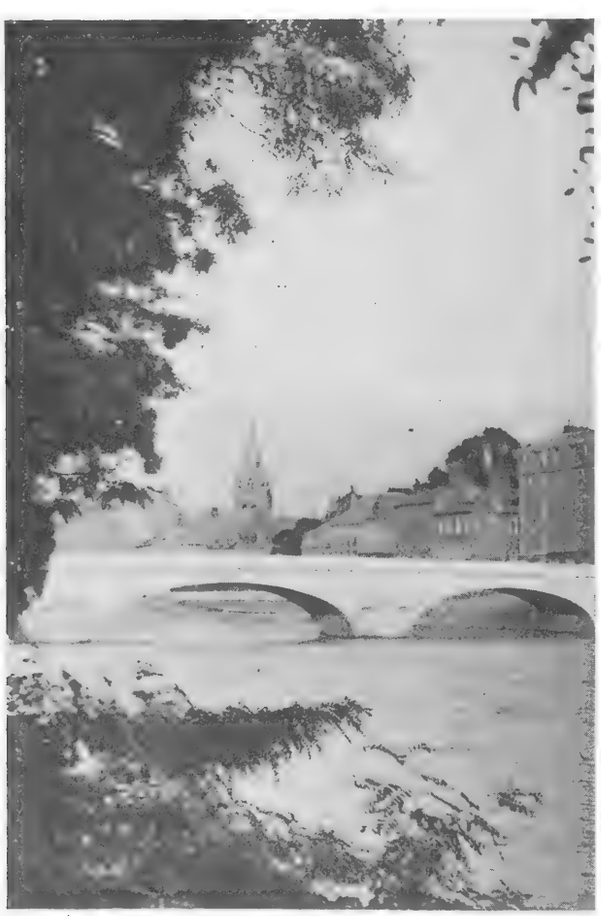
He would, for instance, not hesitate in his condemnation of notable buildings like the Duomo at Pisa, and even the greatly famed Sta Maria del Fiore at Florence, of which the great Dome and possibly Giotto's Campanile are the sole features of interest in a most mediocre composition. His analysis of the merits of the dome itself would not be weighted by the appreciation of Brunelleschi's difficulties. He would tell us that many of our historic English cathedrals are buildings we only acclaim as great because they belong to the past, for he would recognise that but for this fact they would often be as roundly condemned as they are indiscriminately praised. He would emphasise the gulf which lies between the achievements of Wren and the bathos of Hawksmoor and Vanbrugh, and his survey of past ages would accentuate the unevenness of achievement, and show us that what is sometimes regarded as a plain is, in reality, a region of mountains and valleys. As we have said, the writing of such a book needs many qualities—knowledge, analysis and fearlessness, and, unless it were endorsed by the authority of some man of great prominence and repute, it would probably meet with condemnation rather than praise, but it yet remains a book which might be invaluable to all of us, especially those who are about to cross the threshold of a difficult and arduous calling. We may be entirely justified in preserving and valuing antiquities which have no æsthetic merits because of the associations and history connected with them, but it is desirable for purposes of arriving at a just estimate of architectural achievement that we should strip our ideas from any extrinsic considerations.

Among the Alps of Dauphiné.

By H. A. J. Lamb, A.R.I.B.A.

I. Grenoble.

A VIEW TOWARDS THE NORTH, SHOWING OLDEST PART OF THE TOWN AND THE CONVENT OF ST. MARIE D'EN HAUT.



VIEW ACROSS THE ISÈRE, SHOWING THE THIRTEENTH-CENTURY CHURCH SPIRE OF ST. ANDRÉ.

Visiting Grenoble for the first time one gets perhaps the impression of a busy English city rather than that of an important continental town, but later in the day and the sun is setting it is only necessary to climb the hill on the north of the town to see that no town in England, and probably no other in France, has such magnificent surroundings. Situated in the broad valley of the Isère, it is completely encircled with the snow-capped mountains of Dauphiné, which if the weather be clear seem almost to overwhelm the town, and which in the rays of the setting sun are tinged a deep pink, thus forming a wonderful picture of extraordinary beauty. In spite of its rapid growth, Grenoble still contains many interesting relics of the past. Originally a Gaulish village named Cularo, it was first mentioned in letters from Plaucus to Cicero about 44 B.C., and in A.D. 380 it was raised to the rank of a town by the Emperor Gratian, and became Gratianopolis, from which is derived the name to-day. From then up till about the eleventh century its history is confused, when it became the capital of the province. Very early in the thirteenth century the town was nearly swept away by floods. During the religious wars of the Middle Ages it suffered considerably. In 1595 prosperity was regained under the ruling of Lesdiguières, and ramparts were built surrounding the town and strengthened a century later. Early in the eighteenth century the town again suffered much damage from flood, a misfortune which it is still liable to, owing to the broad flat valley in which it is situated.

In 1815 Grenoble was the first town of importance to open its gates to Napoleon on his return from the Isle of Elba, a fact recorded in the hotel I happened to be staying at by a black marble tablet stating that it was here that Napoleon slept three nights on that occasion. The most outstanding feature of the town is the spire of the church of St. André, a thirteenth century building of brick and tufa, a mixture of volcanic earth and sand. The building has been much restored, but the original square belfry still remains. The north front, the only position from which a satisfactory view is obtainable, so hemmed in is it by other buildings, is entirely spoiled by having shops built against it, which extend right up to the main entrance. Opposite the church is the Palais de Justice, a building of characteristic Dauphinois art. The oldest portions date from the fifteenth century. To the west lies the Hotel de Ville, a plain but rather imposing building. The oldest portion of it is the lower part of the round tower on the left, built of rough

GRENOBLE: THE HOTEL DE VILLE.

GRENOBLE: THE PORTE DE FRANCE.

stone, and is probably the last remnant of the Palais des Dauphins built in the twelfth century. It was in this hotel that a conference was held on June 14, 1788, which was the outcome of the French Revolution. The Cathedral is disappointing, a heavy building comprising a mixture of Romanesque and Gothic styles. The tower and porch belong to the eleventh century. In the interior the choir (twelfth century) is the most interesting. To the right of the high altar is a very richly carved ciborium belonging to the fifteenth century.

The biggest industry in this district is the making of cement, and works and quarries for this material are dotted about the valley in all directions. The artificially made cement is composed of a mixture of lime, powdered granite, chalk, coal, and slag, and when found in its natural state it is a mixture of chalk and clay.

In 1842 a French engineer discovered the cement beds by the ancient Porte de France in Grenoble, and from that date began the natural cement industry in this area. This industry has given to the town a feature quite unlike that to be met with in most of the towns on the continent.

Instead of the customary cobbles, the streets are paved with concrete, which, although noisy and slippery for horse traffic, are much more sanitary. Concrete, too, is largely used for carrying the telegraph and electric light cables. Another industry of great importance for which the town is justly famed is the making of gloves, the slightly alkaline nature of the water being particularly suitable to the tanning and dyeing of the skins.

The Porte de France on the western boundary of the town stands practically on the river bank, and was originally built as a pavilion early in the seventeenth century; it is now used as a salvage station. Whether it shelters a lifeboat I cannot say—outwardly there are no signs of efficiency for work in this direction.

The most interesting relic of antiquity in the town will be found in the church of St. Laurent, situated on the north bank of the river, and surrounded by narrow stepped streets, by far the oldest and most picturesque part of Grenoble.

Under the eleventh century apse is still to be seen a remarkable crypt dating from the sixth century, which at one time was at ground level, but is now some eight feet below the ground. In the form of a cross, this chapel contains twenty-eight miniature columns, some of white Pharos marble—one or two have been carefully restored. On most of the capitals can still be seen fine examples of early Christian art. This crypt is one of the very few of the Merovingian survivals, or that of the first decade after the fall of the Roman Empire.

From an educational point of view Grenoble is well equipped. Beside the university, built in 1880, there are several very fine museums. The picture gallery is well

GRENOBLE: THE CHURCH OF ST. LAURENT.

worth a visit, particularly the galleries containing the works of old masters.

Some of the paintings in the gallery of the modern French school are surprising examples of art, if they can be described as such. A few might well have been accomplished by a child, so deficient are they in draughtsmanship and colouring that it makes one wonder how such valuable wall space came to be wasted!

The curious old saddle-back bridge—the Pont de Claix—on the outskirts of Grenoble provides an interesting example of the ancient and modern span in bridge building. Built in 1611 by Lesdiguières, it carries the road 150 feet across the Drac, and is considered one of the wonders of Dauphiny. From the point of view of strength, the flatter arch of the modern bridge built to withstand the greater increase of traffic does not seem nearly so capable in comparison.

(*To be continued.*)

(Section 2 will deal with some of the many villages of interest around Grenoble.)

Correspondence.

Architectural Education.

To the Editor of THE ARCHITECT.

SIR,—I have read with great interest the leading article on Architectural Education which appeared in the last issue of your esteemed journal.

If I may be allowed to express an opinion on this important subject I will point out, in defence of the methods of teaching in our principal schools, certain aspects of the subject which the writer appears to have overlooked.

If, in our schools, in recent years the tendency has been to follow, in some measure, the lead of similar French and American institutions, I do not think this has been done in a mere sense of imitation, but rather that it has been brought about by the necessities of the educational evolution of modern times and the natural desire on the part of the professors to fit their students for the ever increasing demands of our complicated civilisation.

Much as we should like to encourage the cultivation of a purely British style based on the magnificent productions of our predecessors, as suggested by the writer of the article, yet I cannot see how the schools can deal otherwise than they are doing with the numerous and varied subjects which are covered by a modern curriculum.

To-day the main object of a theoretical education is to train and equip young men to be competent to translate into terms of architecture the many specialised problems which confront the designer.

The advantages derived from the intelligent study of ancient examples and the measuring of existing buildings will certainly help the student to acquire a sympathetic knowledge of our historic past and encourage him to produce works of taste and refinement, but it will in no way give him the necessary ability to solve the entirely new problems which confront the modern architect and for which in many cases he can find no precedents.

The great complexity in the planning and arrangement of recent large buildings, with the resulting constructional and technical difficulties which arise out of the rapid evolution of modern life, demands of the architect a breadth of vision and powers of organisation unknown to our former colleagues of less strenuous times.

Again, we see that owing to the knowledge we are daily acquiring of the methods adopted in other countries, together with the new facilities of travel and intercommunication, certain well-defined types of buildings (modified only sufficiently to suit local conditions) are being evolved in civilised countries all over the world.

To-day the plan of a modern bank, a departmental store, or a railway station must answer certain definite requirements and conform to a recognised type whether it be erected in Edinburgh or Madrid, and the contrasts which in the past were so marked in the characteristics of each national art tend more and more to be replaced by a different characterisation which fixes indelibly the purpose for which each particular edifice is destined. As an illustration of the statement we see a far greater difference of character between a London Inn of the Tudor period and a "Roman Albergo" of the same epoch than between two large modern hotels erected in the same cities.

It will be said that the gradual dropping of national and local characteristics in favour of more stereotyped conceptions is to be deplored, but the change is inevitable, being brought about by the ever varying demands of our time.

To-day the character of a building is only partly influenced by its geographical position and its environment, and is really determined by the function it has to fulfil.

In the last generation, when architectural education was at a very low ebb, many buildings were designed in either classic or Gothic styles which, if they showed evidence of archæological study, left the onlooker puzzled to determine their destination

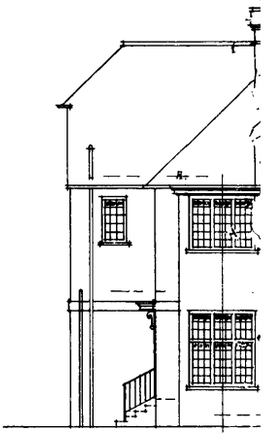
HALL

HOUSE

CRO

SCALE OF FEET.

SOUTH.
ELEVATION



WEST.
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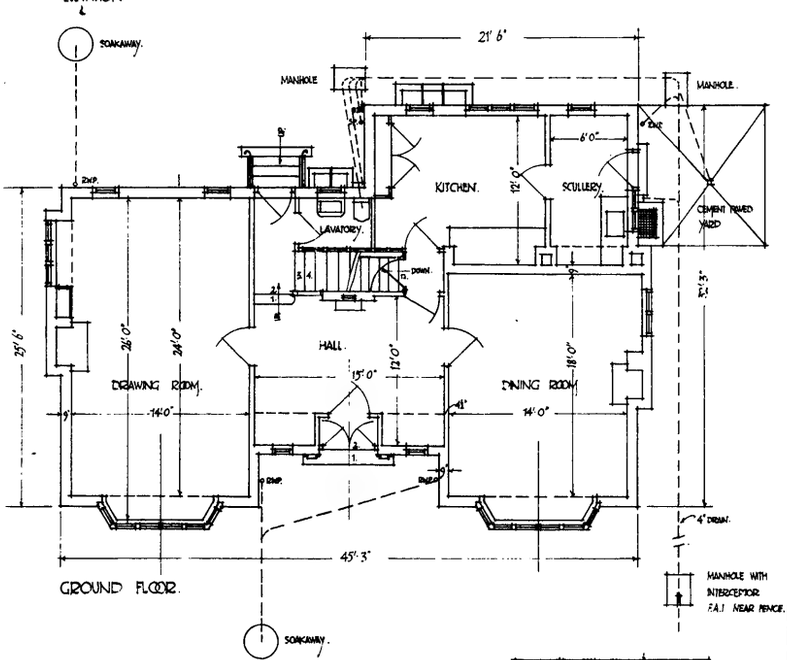
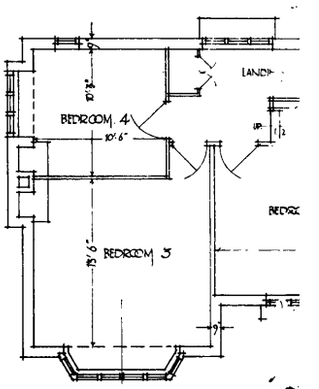
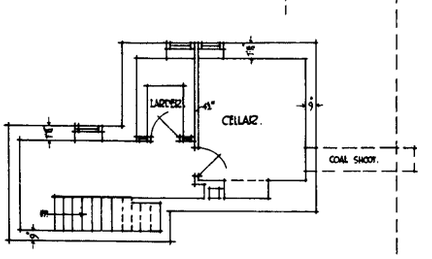


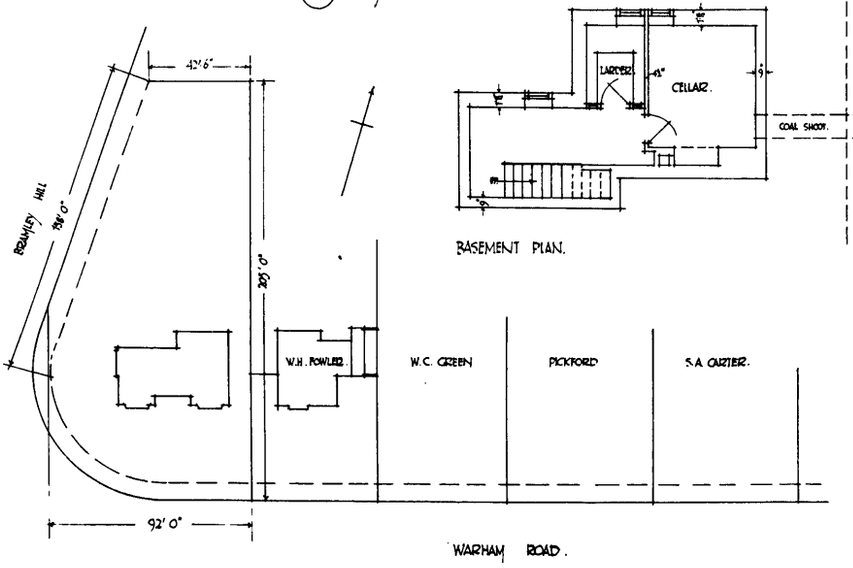
GROUND FLOOR.



FIRST FLOOR.

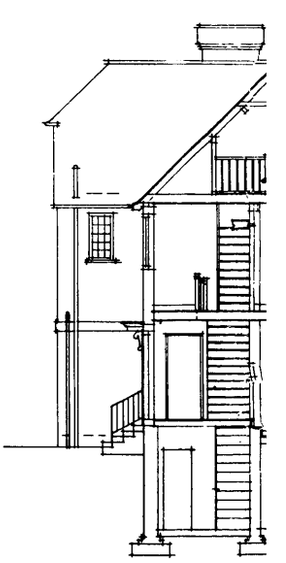


BASEMENT PLAN.



WARHAM ROAD.

BLOCK PLAN. SCALE. 1/500.



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HOUSE AT WARHA

NICHOLLS & H

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HAM ROAD
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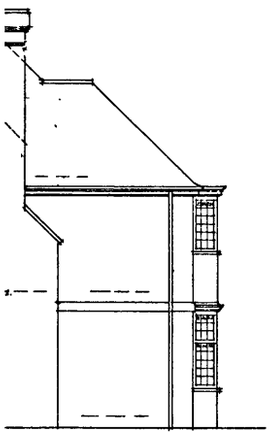
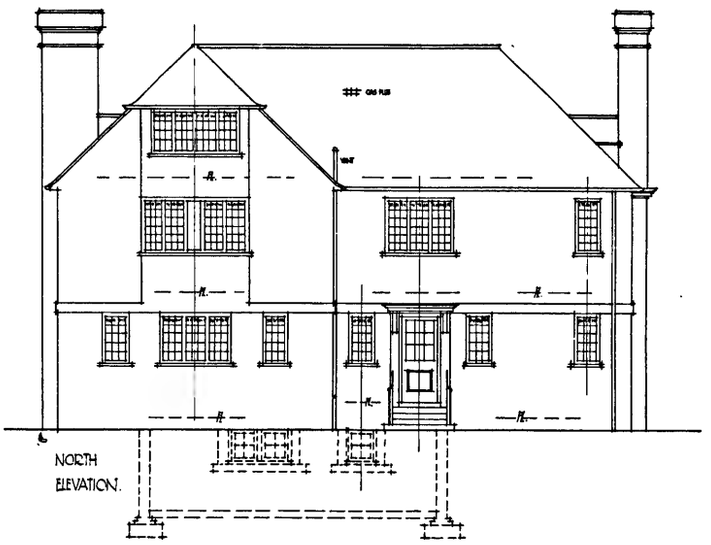
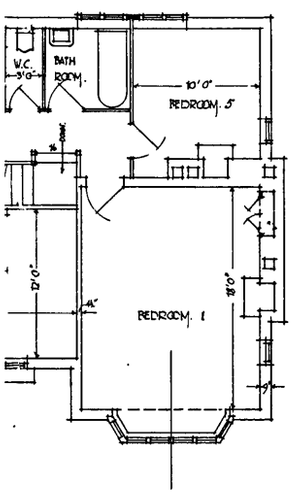
FOR ERNEST DOWDEN. ESQ^R.

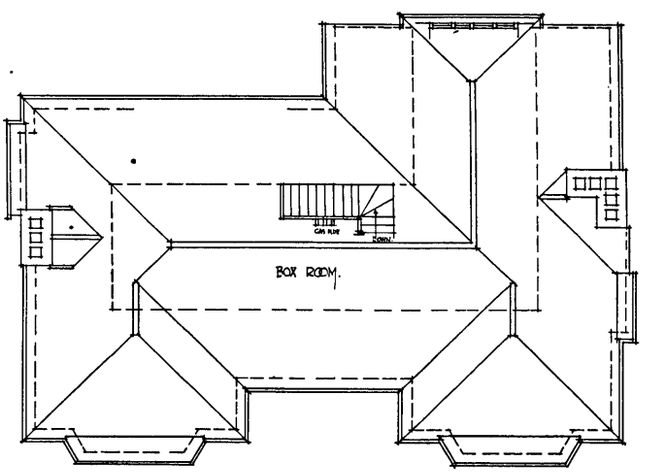
No.1.



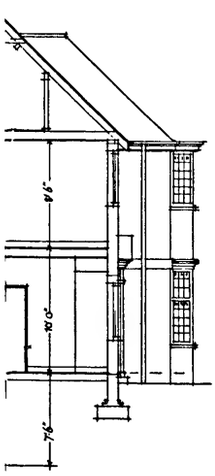


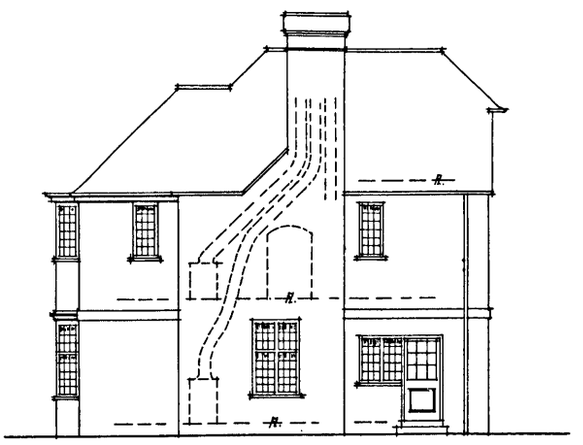
NORTH
ELEVATION.





ROOF PLAN.





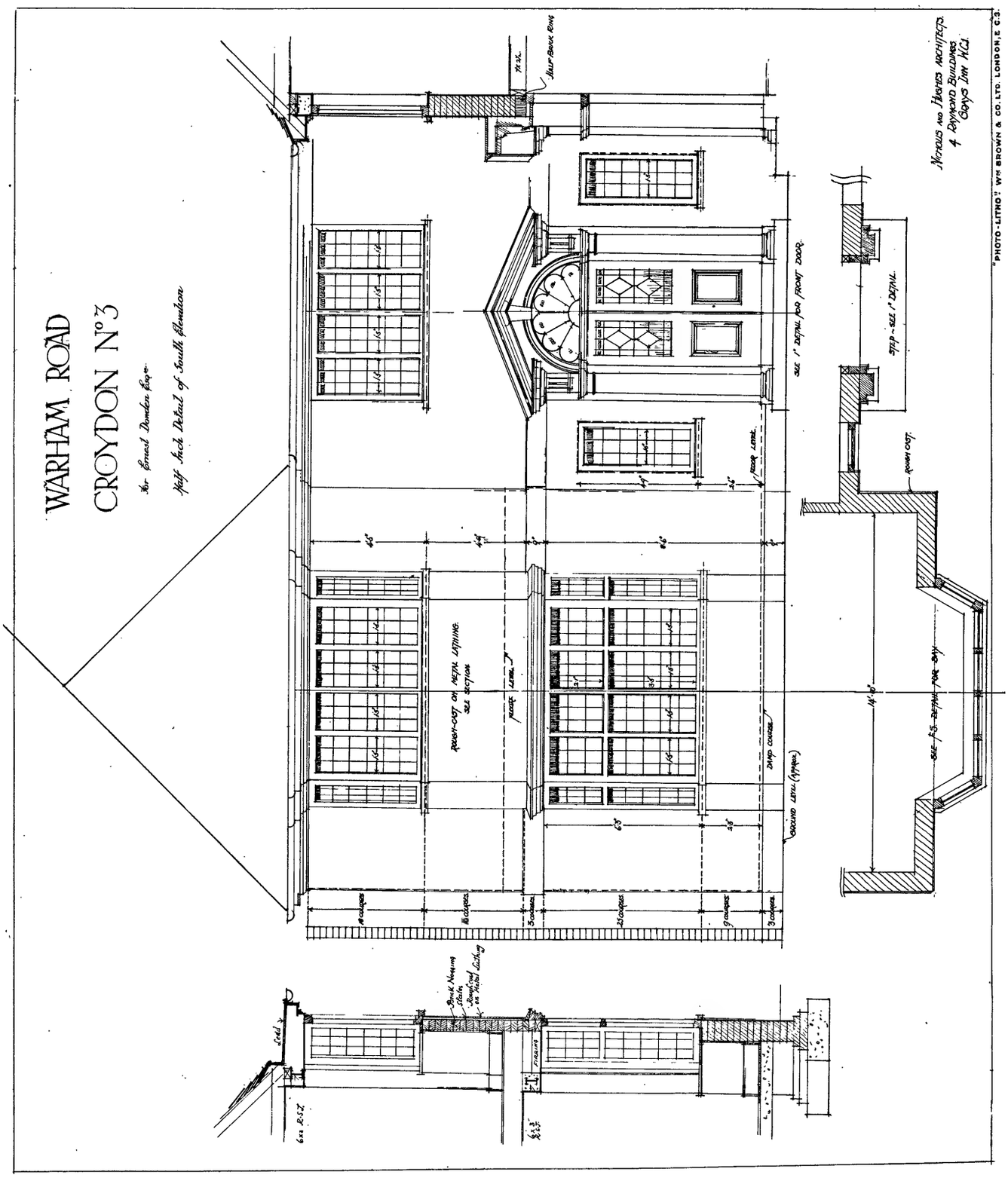
EAST.
ELEVATION.

NICHOLLS AND HUGHES. ARCHITECTS
4, RAYMOND BUILDINGS GRAYS INN.
W.C.1. AUGUST 1923.

"PHOTO-LITHO" WM. BROWN & CO. LTD. LONDON, E.C.3.

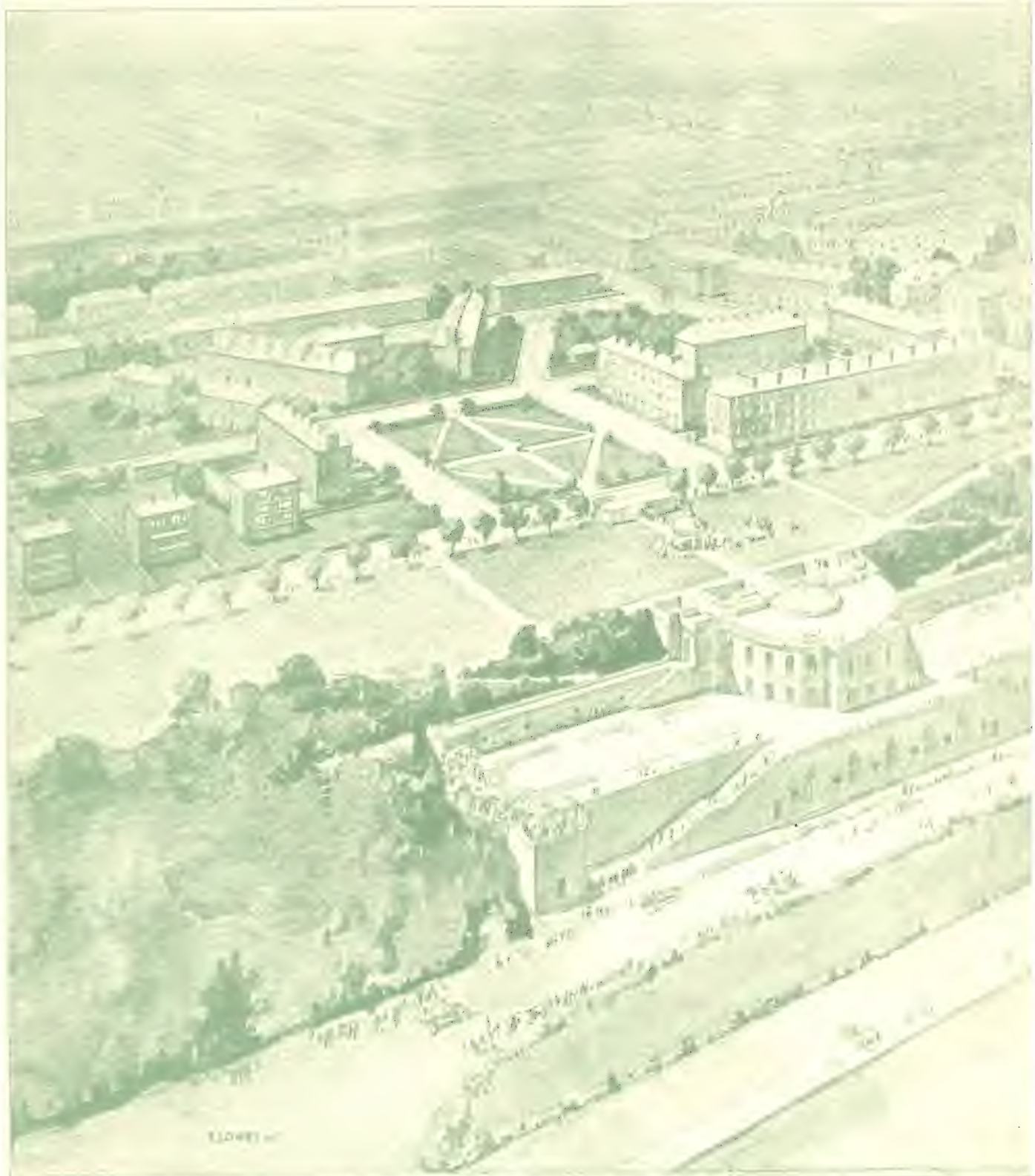
ROAD, CROYDON.

ES, ARCHITECTS.



HOUSE AT WARHAM ROAD, CROYDON.

NICHOLLS & HUGHES, ARCHITECTS.



WINTER GARDEN AT S

WINTER GARDEN AT

D. N. MARTIN-

SOUTHEND-ON-SEA

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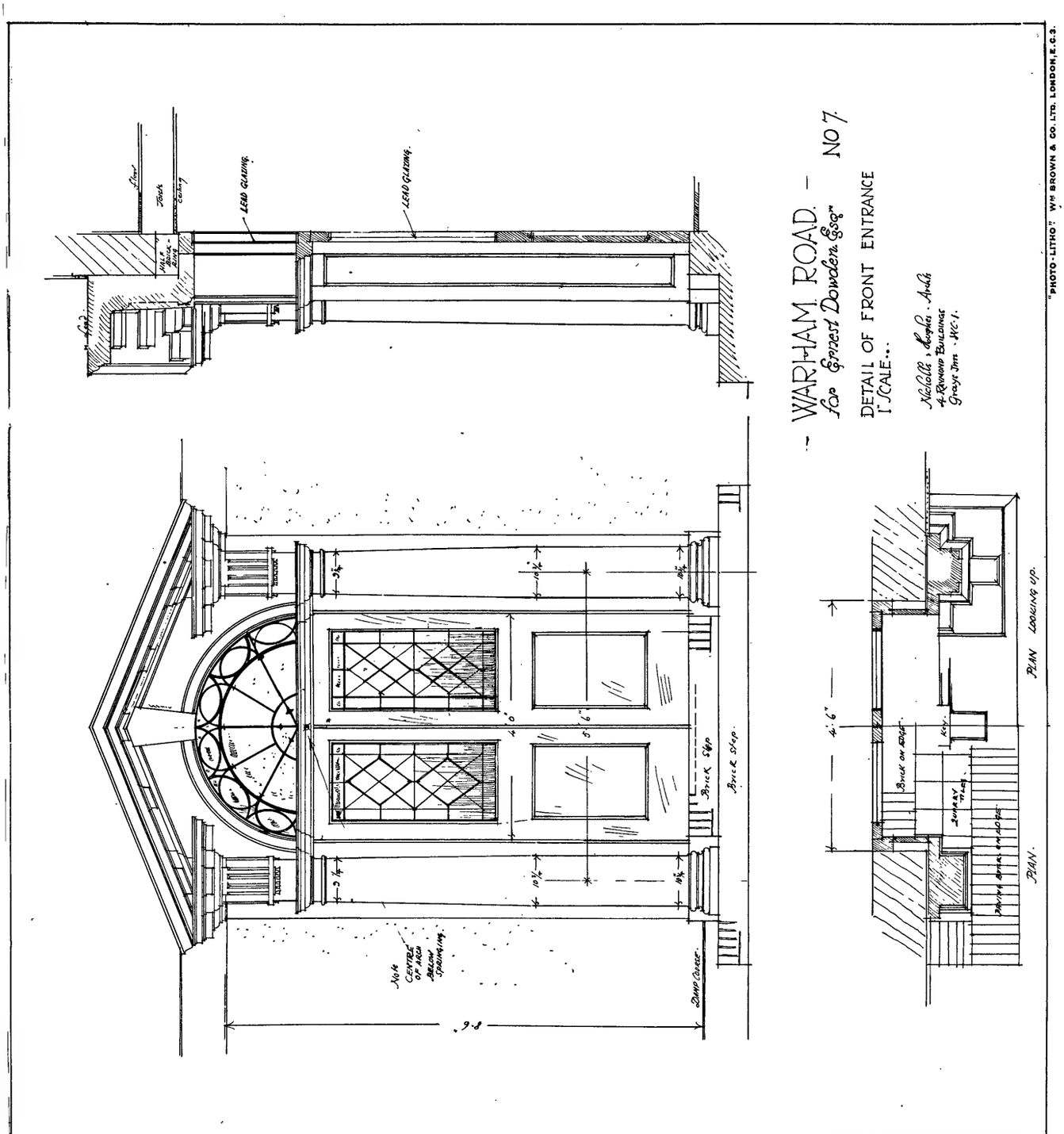
SOUTHEND-ON-SEA.

KAYE, ARCHITECT.



HOUSE AT WARHAM ROAD, CROYDON.

NICHOLLS & HUGHES, ARCHITECTS.

"PHOTO-LITHO" WM BROWN & CO. LTD. LONDON, E.C.2.

and the purpose for which they were built. Railway stations resembled churches and offices were camouflaged as classic temples. These errors were due in no small degree to the inadequacy of the architectural education of a time when the pupilage system was in force and a broader and more comprehensive training had not yet come into being.

The education system adopted in the Continental and American schools, which has been based on the experience of generations of eminent teachers, is to give to the elementary student a grounding in mathematics, history, archæology, and to teach him the rudiments of composition and construction. Later he is taken through a course of design in which he is encouraged to think for himself and to deal with any architectural problem in a methodical and scientific manner, and at the same time to mark for each particular building its special distinguishing character.

When he has left school he will be free to follow his own inclination and develop his particular style and method of expression. He will either respond to the charm of the work of former generations or aim to become a pioneer in the world of modern thought.

Whatever his bent the training he will have received in his school years will have enabled him to give personal expression to his ideas and have equipped him with the necessary technical ability to face the complex problems of his practice, the number and variety of which increase with each succeeding year.—Yours, etc.,

ARTHUR J. DAVIS.

"The Small Architect."

To the Editor of THE ARCHITECT

DEAR SIR,—In your issue of August 1 Mr. Charles H. Craik, in his article on "A Menace to the Small Architect," draws attention to a matter of great importance to the profession generally.

In the last generation some of the finest work was done by small firms; in some cases consisting of the principal, a junior draughtsman and a pupil. In cases like this it was usual to find that the architect was an architect because he loved doing his own work. He remained small because he was an artist, and had no great social or business ambitions.

His work rarely appeared in Academies or Journals. This type of architect is fast dying out.

Gaps between artistic work were filled in by doing estate surveys, feuing plans, alterations to business premises and small houses.

With the outbreak of the war, men who had succeeded in evading service and who foresaw the lean years, crowded into the Civil Service or into other walks of life where, although the incomes may not be large, they are at least secure from actual privation.

As Mr. Craik points out, the builder, joiner and shop fitter now secure direct the work by which the small architect paid his rent and expenses until such time as some remunerative work came along. The quality of Architecture will not be improved by the crushing out of the small architect, for he is generally a thoroughly competent man if not a scholar and an artist.

When the Institute is asked to recommend a man they usually nominate a man who is already successful and well established and one who could well refuse to undertake the work.

Little is done here to encourage the small man as in France and other continental countries.

Sir John Stirling Maxwell, in a recent lecture in Glasgow, advised us to combine, as they do in America; but I would suggest that in such combinations the personal touch is in danger of being lost and also there is a tendency for business to crowd out art; and whatever we may think to-day, Architecture was first a necessity, then an art, before it became a business.

The law compels a man with toothache to go to a registered dentist, but it cannot compel a man who wants a house built to go to an A.R.I.B.A.

Twenty-five years ago, work now done by builders who keep a draughtsman was done by the small architect.

If the Institute and Provincial Allied Societies could do something to protect the small architect they would do a lasting service to the art of Architecture.

The public cannot be persuaded that they get more value for their money by employing an architect than by employing a builder direct. Burgh Engineers' Departments of our Corporations could do much to stop this practice by insisting that all schemes submitted for their approval be drawn out by qualified men, and architects could do much to help each other by boycotting contractors who keep draughtsmen and do architectural work.

The details given in Mr. Craik's article are well known and could be enlarged upon by many of us, and he deserves great credit for tackling so courageously a somewhat unpleasant subject.

Many able men are being compelled to abandon a profession for which they are thoroughly qualified and for which they have sacrificed everything, and all through circumstances which might to some extent be rectified.—I am, yours faithfully,

WILLIAM DAVIDSON.

One Method of Dealing with Liverpool Labour.

The situation of the building dispute seems to be still obscure, but from all accounts Liverpool still remains the stumbling block. If this is so, and if outside Liverpool a National Settlement would be accepted and adhered to, there might be some reason in cutting off Liverpool for a term of years from the operation of National terms. But if this were done the Liverpool employers would have to make it clear that the operatives there would have to take the rough and smooth together. They now gain by being outside an agreement. Would they be content to accept local settlements if such settlements placed them at a disadvantage? If they would do so a good case might be made out for cutting off Liverpool from National Settlements and the operatives would probably in the long run lose as much as they would now gain. But there is often much to be said for the principle of allowing people to stew in their own juice if they allow themselves to be governed by unreason.

"The Architect" Fifty Years Ago.

AUGUST 15, 1874.

HOUSES IN CROMWELL ROAD, KENSINGTON.

On a piece of land at the angle of Cromwell Road and Knaresborough Road Mr. W. Watts, of 9 Motcomb Street, Belgrave Square, is erecting a group of three houses, from the designs of Mr. T. R. Parker, of Parliament Street. The ground has a 90 feet frontage by a depth of 80 feet, and as the houses are rather superior in character to those immediately adjoining, we give the sizes of the principal reception rooms of the last house of the three. On ground-floor dining room, 25 feet by 20 feet; library, 13 feet by 17 feet; gentleman's room, 13 feet by 12 feet. On one-pair drawing room L-shaped extreme dimensions, 48 feet by 22 feet, and boudoir, 18 feet by 13 feet. Over the porticos and in the conservatories will be tile paving by Minton; green slates will probably be used for the roofs, but the peculiar tint is not yet selected. The general level of the works at the moment is about that of the third floor. In the finishings, Messrs. Gibbs, of Knightsbridge, will supply the marble chimneypieces; Messrs. Yates, Haywood & Co., of Thames Street, the stoves. The closet fittings will be obtained partly from Messrs. Bramah, and partly from Messrs. Underhay, of Crawford Passage, Clerkenwell. The water fittings are in accordance with the new Act, providing for a constant supply, and Messrs. Tylor's (of Newgate Street) regulators will be used. Hot water apparatus will be provided for service on all the different floors. Especial attention has been paid to the trapping and ventilation of the drainage; every drain has a Jennings trap, ventilating into the open air, and a special ventilating air-shaft is provided, which runs up above height of the chimney stacks. The floors are pugged throughout. Each house has an angular bay window, running up to the level of the three-pair floor; the dressings are in Portland cement, supplied by Messrs. White Bros. & Co. There are rusticated piers on the ground floor, and semicircular headed windows on the one-pair, the general facing of red bricks. The Portland stone for columns to portico, sills to windows, and elsewhere is from Messrs. Dike & Bruton. There will be an ornamental iron cresting at the ridge level, and also along the cornice before the one-pair windows, pattern not yet selected. The rolled iron is from Mr. M. T. Shaw, of Cannon Street, and the bricks from Mr. Bird, of Hammersmith. Mr. Morgan is foreman in charge.

BLYTH.—The Town Council have passed plans submitted by the Rev. C. F. Medd for a parish hall in Church Street.—The Development Committee are to discuss with the Automobile Services, Ltd., a scheme for a workshop and garage in Plessey Road.—Tenders are to be obtained for the installation of central-heating apparatus at the new fire station.

DOMOCK'S COTE.—Cambridge County Council propose the erection of a bridge across the river Cam, and applied for a grant from the Ministry of Transport.

QUEEN'S COLLEGE, OXFORD.

Outspoken Letters of a Young Architect.

My Dear E.,

I am once more in somewhat of a dilemma; a man I know came to me recently to ask me to design a house for him embodying his ideas gathered together from a study of what had appeared to him in various buildings he had seen. He insists on having sash windows of the largest possible size, the house itself being a half timbered one recalling some of the abominations erected during the last fifty years. I want work and can ill-afford to lose a client, but if I satisfy this client, shall I not be a marked man whom those possessing any taste and knowledge would unquestionably avoid? I have listened to what he had to say, saying little or nothing at present, and I should be much obliged if you would give me your advice before I go further.—Believe me, ever yours sincerely,

B——

Surrey, 1923.

Dear B.,

Your dilemma is an awkward one, but you are quite right in marking time. You will usually find clients of the kind you mention are astoundingly ignorant, and for that reason their conclusions are sometimes like weeds which, despite their height and apparent vigour, can be easily uprooted. I would advise your showing your client some good drawings of old half-timber work and asking him whether it is not the sort of work he likes, and then having listened to his remarks about windows, show what you would like to carry out in a general and incomplete way in colours. If you insist at every stage that you are closely following his ideas he will probably believe you. A little later on you might point out to him that a sash window can never be more than half opened, and as you quite agree with his ideas about plenty of ventilation he will, because you have not at once "downed" his wishes about sash windows, believe that you have simply come across an objection in your desire to adhere to his general instructions. If he consents you will have secured your framework. The next step is to take him to see some old house, and casually remark on the effect given by the lead lights in the windows. He will probably say they cut out the view and darken the rooms, though they look very well. You will tell him casually you agree with him and that to obviate this defect modern makers use much larger squares, reinforcing them with iron, and that these in combination with metal casements are enduring and save paint and repairs. You will probably succeed in getting your way by convincing your client that you are step by step carrying out his ideas. Such a man as you describe is usually more intent on getting what he thinks his instructions carried out than on anything else, and what you have to do is to suggest your own ideas and receive them back as your client's instructions. Let me know how you get on and whether my suggestions have been of any use to you.—Ever your old friend,

E——

Six Months Later.

My Dear E.,

You will be glad to hear that the outcome of my difficult experience about which I wrote to you has followed the course you described to me. I have not succeeded in emulating Mr. Baillie Scott in his charming versions of English traditional building, but I have been able to obtain my client's consent to a design which gives me reasonable satisfaction. I have, naturally, had other difficulties over chimney pieces, staircases and other details, but I have taken the pathway you suggested to me. I had the satisfaction of receiving a letter from my client a few days ago in which he said he had recommended me to his friend Z, who meant to build a large house near Torquay. He added that he had told his friend that what was essential was an architect—was to find a man who could carry out instructions and not attempt to impose his own ideas, and that I had succeeded in giving him every satisfaction, so my difficult client may prove thanks to you the forerunner of more. He now looks upon me much as he regards his favourite walking stick, as a "find," the selection of which is a tribute to his knowledge of men and affairs.—Believe me, ever yours sincerely,

B——

Surrey, 1923.

New Books.

"Artwork." Number One, 1924. 3s. 6d. net. Published by The Artwork Publishing Co., 27, East Castle Street, London, W.

An illustrated Quarterly of Arts and Crafts. A very interesting article on "Mosaic as a Wall Decoration," is contributed by Robert Anning Bell, R.A. The author gives some very practical information of a technical nature which should be very helpful. Mr. Edmund J. Sullivan contributes an article that should be of interest to all teachers. He describes some of the questions he has been asked by pupils, and he also includes some valuable suggestions which could very usefully be taken to heart by many of our art masters.

Mr. Kineton Parkes contributes an article on the sculpture of Mestrovic, which, in itself, is more of a catalogue of the sculptor's work than any attempt to explain inner thoughts which are responsible for his work. Many of us were unable to go to the "memorable show at the Victoria and Albert Museum," and therefore cannot recall to mind the many pieces named by Mr. Kineton Parkes. It is, of course, very difficult to write on the subject of the inner thoughts of any sculptor or artist. But in a journal entitled "Artwork," we expect something tangible, some definite enlightenment in respect to the subjects included. To state that Mestrovic's work cannot be ignored is, alas, stating a great untruth. Millions have never heard of him, and live quite comfortably without this knowledge. Many millions will be utterly unable to see any evidence of genius in his work. He has undoubtedly been well advertised, and those responsible for the publicity are to be congratulated, but some will admit that much is very crude and ugly, and of a primitive nature. On pages 9 and 10, two illustrations of Mestrovic wood sculpture are included.

Mr. C. P. Russell contributes a short article on "The Dynamic in Poster Art." After informing us that the palm for excellence in poster art has returned to Britain, the article devotes its entire attention to making extravagant claims on behalf of the work of Mr. E. McKnight Kauffer. As a leader in the world of poster design eight illustrations of his work are included, and we are unable to pass any favourable judgment upon them. Mr. Russell states "that at first glance some of Kauffer's work may appear complicated. After a moment's examination, however, they resolve themselves into quite simple elements." We would remind the writer of the article that 95 per cent. of the public cannot give the necessary moment of time to examine Mr. Kauffer's work, which at first appears to them complicated, and is in consequence dismissed from their minds; and therefore fails altogether to create what Mr. Russell tells us is Mr. Kauffer's belief "that a poster must not only attract but effect. No man who beholds it should go away feeling quite the same man that he was before." Personally we have no wish to be rapidly changed as we pass along on our homeward journey every night, by the posters that are forced upon our eyesight; the feeling would be quite uncomfortable if we were to behold 20 posters that fulfilled Mr. Kauffer's expectations.

Edmund J. Sullivan, A.R.W.S., contributes perhaps the best article in the issue under the title "Elephants and Fairies." Perhaps this article has struck a deep chord of sympathy in ourselves, and therefore pleases more than the others. All who have been teachers in an art school, or for that matter still teach at such places, will be amused, interested and educated by Mr. Sullivan's article. Many useful hints are contained in the same, and we can strongly recommend them.

"The Position of Modern Photography Among the Arts" is the title of an article by Mr. E. O. Hoppé, and the author has taken some very fine photographs, and nobody will gainsay that a photographer possessing an artistic mind and temperament will produce far finer and better photographs than an operator who merely removes the cap. The art in photography consists in the selection of the view and pose, the appreciation and correct representation and rendering of the tone values. But photography is a mechanical scientific process. Beautiful results have been produced by accident, and by individuals who have had no training or experience.

Men and women without any knowledge of architecture, painting or modelling have never been known to produce a fine architectural conception or a beautiful picture splendidly painted, or a group of sculpture executed with refinement and taste. Fashion has proclaimed freaks beautiful and clever, and some stand before a futurestic picture and fill the air with their rapturous praise, but whilst many futurists are mere copyists, none of them are devoid of knowledge; the mere fact that they create forms without understanding and meaning stamps them as possessing the gift of design.

As a whole the first issue is very good, and we wish the journal every success.

The Acosta Garden, Granada.

We give from the " Architectural Record " of New York some illustrations of a new Granada garden which the painter Don José Rodriquez Acosta has had made.

Admiration of antique sculpture has led Señor Acosta to study

THE ACOSTA GARDEN: EXTERNAL VIEW.

how it could best be introduced into the typical local setting. He chose his site on the precipitous southern slope of the Monte Mauror, close to the Alhambra. This was the ancient *Campo*

THE ACOSTA GARDEN: THE STEPPED WALL AND THE SIERRA NEVADA BEYOND.

THE ACOSTA GARDEN.

de los Martires, legend making it the scene of early Christian persecutions, and, later, of the dungeons where were thrown at night the Christian captives who worked on the Alhambra.

Structurally the garden is Andalusian. Great stepped retaining walls follow down the hillside, garden courts are enclosed by arcaded walls similar to those already described in the Generalife, and parts of the garden lie in the embrace of the house itself, as at the Alhambra; but all this is much more architectural than in the prototypes, displaying, indeed, an extraordinary appreciation of ancient Roman building principles. Andalusian tradition is departed from by the introduction of garden sculpture, a columnar exedra, and a general use of the orders. There are no polychrome tiles and in truth their introduction would seem trivial in the monumental scale of things. The planting is wholly green, cypress and box. Water is not running and rippling in the more Spanish fashion but lies in quiet pools, and the only colour these reflect besides white and green is the deep blue of the southern sky. As this garden is still unfinished it is somewhat unfair to the owner to illustrate it; at the same time it is too promising and too inspiring to be omitted.

Competition News.

Members and Licentiates are advised to take no part in the Salford baths and wash-house Competition, because the conditions are not in accordance with the regulations of the R.I.B.A. The Competitions Committee are in negotiation with the promoters in the hope of securing an amendment.

The Corporation of the City of Manchester invite architects of British nationality to submit competitive designs for an Art Gallery and Museum of Art. Applications for the conditions of the competition should be made to me accompanied by a payment of five shillings, not returnable. P. M. Heath, Town Clerk, Town Hall, Manchester.

STRETHAM.—Revised estimates have been prepared by the county surveyor of the Isle of Ely for the erection of a bridge across the Old West River, showing costs of £3,000 for bridge and culvert, and £1,400 for approaches and roadway. The plans have been approved by the Ministry of Transport Engineer and by the Ouse Drainage Board.

TORQUAY.—A site at Westhill has been purchased by the Corporation for a new elementary school.—A loan of £13,600 has been sanctioned for the erection of 25 houses at Stentifords Hill in connection with the clearance of the Pimlico insanitary area.—Plans passed: 12 houses at Barton, for Mr. T. E. Hill.—Land at Torcrest is being laid out for development.

No. 5

SOLIGNUM EXHIBITION NEWS

August, 1924

The freshness and cleanliness of the Public Lavatories at Wembley are in large measure due to the use of SOLIGNUM on all the woodwork.

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"Specialists."

(From the "A.S.A.P.U. Journal.")

By a Chief Assistant.

It will, no doubt, be admitted that the chief topics of conversation in the architectural world during the last three or four years can be grouped under two main headings, namely, Unification or Registration and Architectural Education. As one who has already had continuous contact with his fellow architects, the writer does not hesitate to say that the education question has received far more consideration than any other.

It is not an overstatement to say that, at the present time, the architectural profession has a very great need of a wide and thorough education, especially with regard to materials and new methods of construction, both of which are tending to make greater demands upon the skill of the architect. In fact the demand has become so wide and comprehensive that specialisation has obtained a firm footing in the profession. So much is this the case that many architects throughout the country are, as soon as they touch steelwork or ferro-concrete, for instance, entirely in the hands of the specialists.

In this connection an instance has recently come to the notice of the writer which appears to be of sufficient interest to prompt him to bring it to the notice of readers of the "Journal." It may serve to prove that the "qualified engineers" employed by some firms who are "pleased to submit designs and specifications for steel construction" are not in all cases reliable.

When dealing with specialists in steelwork, or other constructions, it is very necessary, in order to place all tenderers or competing firms on the same basis, to issue some sort of schedule of conditions, but it is more than ever necessary that when the tenders come in they should, together with the schemes, be thoroughly investigated to see if they do fulfil the conditions laid down.

A short time ago it was necessary for the writer to procure tenders for some steelwork in connection with the extension of a large building, and a special roof truss of a peculiar design was necessary for the job. The span was not very large as spans go nowadays (60 feet), but there were special conditions such as breaks in the outline of the roof and a special area of open space within the framing itself that had to be left.

An outline of the truss was made and particulars as to the weight per foot to be allowed, wind pressure, and stress to be allowed in the members, were sent to six constructional steelwork firms.

Within 48 hours of these particulars going out an opportunity was found by the writer to determine graphically the stress of the members, so as to ensure that the job would be well balanced and sound. He had not been working very long before he found that the truss, as originally designed, had a grave defect, which could, however, be easily overcome by the addition of another member.

Letters were immediately sent to the engineers drawing their attention to this point and suggesting a way out of the difficulty. Much to the writer's surprise a reply was received from one of the engineers with a quotation, giving their scheme for the work, which showed that the weakness referred to had not been realised. On investigation the member that was so weak was found to be alternately in compression and tension to the amount of about 30 tons and in the scheme received this member was shewn as a $2\frac{1}{2}$ in. by $\frac{1}{2}$ in. flat.

On writing to them again they forwarded a drawing shewing the graphical determination of the stresses, and a special polygon of force for the joint involved. They were informed by return of post that the graphical drawing had no connection with the roof in question, and in any case, to check one of the members mathematically would soon put it beyond all doubt. They replied at once that their scheme was quite right, but in deference to the writer's misgivings, they would increase the member by substituting a $2\frac{1}{4}$ inch by $2\frac{1}{4}$ inch by $\frac{1}{4}$ inch angle for the $2\frac{1}{2}$ inch by $\frac{1}{2}$ inch flat.

A letter was again sent to this firm stating that this was of no use, and giving the stresses in the members as determined by calculation. They thereupon admitted that their scheme was wrong, and suggested that $3\frac{1}{2}$ inch by $3\frac{1}{2}$ inch. by 5/16th inch angles in duplicate should be used.

But this time other schemes had come in. One firm of repute who had adhered to the original design quoted for this member and sketched two 12 inch by 3 inch channels bolted together. Further comment upon this wide variation is needless. Figures of course, cannot be given, but it is quite allowable to state that the firm who quoted for the roof truss which was structurally unsound were 50 per cent. below anyone else. The question arises—what would have happened had the first estimate been accepted? In a good many cases this would undoubtedly have happened. It might have caused a complete collapse of the roof, but happily such a result would probably have been avoided by the 2 inch by $\frac{1}{2}$ inch flat failing long before the trusses could have been hoisted. It may be that the policy of such a firm is to prefer discovering such difficulties as this after the order has been placed, and so reap profit on a large bill for extras. Even this supposition pays them the compliment of allowing them to be capable of discovering the weakness—which at least would appear doubtful.

Such an incident shows what pitfalls beset every step of the architect who places himself in the hands of specialists. Naturally, the writer does not suggest for one moment that all specialists deal with work on these lines, far from it, but he does insist that it is not fair to the people of repute who tender, that they should lose work through competition from people of this kind. The only way to safeguard specialists of repute is for the architect to possess the ability of checking designs of this nature to ensure that the work he is accepting fulfils the conditions laid down. Then, and only then, can he protect the reputable from the unscrupulous.

It is probable that instances of this nature are known to most members of the Union and it forms further proof, if such is needed, that the average architectural assistant must have a training wider and deeper than has previously been found sufficient. Having reached this stage he must be adequately paid. It is the writer's firm belief that if we demand a minimum wage we must in turn guarantee a minimum standard of efficiency. What steps have we, as a Union, taken in this matter up to the present?

General News.

FINCHLEY.—The Urban Council have passed plans for 5 houses, Windermere Avenue, for Mr. R. Ellwood; 8 houses, Brookland Hill, for Messrs. Gorsubil, Ltd.; 6 houses, Birley Road, for Messrs. A. J. Harris & Sons; 4 houses, Lichfield Way, for Mr. G. C. Swanson; 8 houses, Herney Close, for Mr. F. W. Bristow; 4 houses, New Road, near Argyle Road, for Mr. E. S. Gattell; 6 houses, Elmhurst Avenue, for Messrs. Heywood & Bryett; 34 houses, Forresters Estate, for Messrs. C. A. Day, Ltd.; new schoolrooms, N. Finchley Congregational Church, for Trustees.

HAMPSHIRE.—The County Main Roads Committee have prepared a scheme to cost £250,000 for the improvement of the main road from London to Southampton, between the county boundary at Blackwater and the city of Winchester.—The County Small Holdings Committee propose the purchase of land and buildings at a cost of £8,000, and an expenditure of £50,000 for adaptation and equipment as small holdings.

OLDHAM.—A Committee of the Town Council have visited King's Road and instructed the Assistant Borough Engineer to prepare bridge schemes. Bridge schemes are proposed at Goddard Street and Honeywell Lane.

OSSETT.—The Town Council have now purchased a site from the Rowley Trustees for the erection of an elementary school at Gawthorpe.

OTLEY.—Relief scheme suggested by the Urban District Council include the widening of Otley Bridge, enlargement of swimming bath at Wharfmeadows, new footbridge from Sandbeds to East End, extension of water main in Farnley Lane, widening of Pool Road and Weston Lane and the continuation of Farnley Lane to the Ings. Major F. H. Fawkes has given the Council additional woodland adjoining the Wharfmeadows Estate.

OXFORD.—The Town Council have passed plans for a new wing to College Buildings, Norham Gardens, for the Governors of Lady Margaret Hall.—The Corporation propose the purchase of ten acres adjoining the river Cherwell, at £110 an acre, for a recreation ground. The development scheme includes the construction of a bathing pool.—It is proposed to grant a building lease of a site in Broad Street to Mr. Arthur Pearson, on condition that buildings are erected at a cost of not less than £14,000.—A scheme for the erection of twenty huts at Gipsey Lane, at a cost of £3,600, has been prepared to accommodate evicted tenants.

PARK PREWETT (HANTS).—A house is to be erected at the County Mental Hospital for the Assistant Medical Officer, at a cost of £2,000, and the plans have been passed.

STALYBRIDGE.—The Town Council have appointed the Mayor to represent the Corporation on the District Committee proposed to be established for the area of Lancashire and Cheshire in regard to town planning.—A site near Grey Street is being considered for the erection of a school.

TRETTON.—The County Councils of Isle of Ely and Holland have accepted the tender of the Yorkshire Hennebique Contracting Co., £2,508, for the construction of a ferro-concrete bridge.

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Architectural Education.

Mr. Arthur Davis in his letter on the subject of Architectural Education last week has, we think, missed the meaning we intended to convey.

It is perfectly true that certain buildings of a given type in differing countries are solutions of the same problem, and consequently their planning and arrangement is bound to follow the same lines, but that does not seem to us to necessitate the architectural treatment of such buildings having the same similarity in different localities as their planning and arrangement may show.

Nor is this similarity of purpose and use quite uniform. The large bank of a capital and the small bank of a country town are built to satisfy the needs of banking, but the two problems only bear a superficial resemblance to one another. Similarly, the huge hotels of America and other business institutions in the same country have almost no counterpart here or in most other lands. American requirements and wants may be described as being "continental" in their scope and scale, while outside a small number of buildings in London and a still smaller number in our greater provincial centres the buildings required here have little resemblance to those of the Gargantuan conceptions of America.

It may be questioned if some of our larger commercial buildings are not often financial errors, while it is certain that it is unsafe to count on such an extension of trade and population as that which took place in the nineteenth century as affording a reliable ratio of future growth. Nations, like men, have not a uniform ratio of growth, which takes place rapidly in the earlier stages and more slowly as maturity is reached. We do not know when American resources will cease to afford scope for further growths of population and wealth, how long it will be before production outstrips demand, but we may be fairly sure that trade and commerce here can only be expected under the most favourable circumstances to expand at a much slower ratio than has hitherto been the case in an era when foreign competition was negligible and when the resources of our neighbours were for the most part untapped.

Many of us have seen England drop from the greatest coal and iron producing country to a third rank, and many of us may live to see it outstripped in other departments of commercial activity.

It may be asked what bearing this has on the question of architectural education, but we believe it can be shown to have a very close one, because it must affect the nature of the buildings which we shall require. The great buildings required in America are only comparable in size with the public buildings of Ancient Rome built for the needs of a power "continental" in the ancient world as America is "continental" in the world of to-day.

The great majority of the buildings required here are hemmed in and surrounded by buildings of the past, and though between these and the buildings required to-day there is a difference in size and scope, it is one of degree and not the difference between Brobdignag and Lilliput. Here and there, chiefly in London, there are indeed indications that men's imaginations are aflame with visions of ambitions, but we might with some reason suggest that the new rebuilding of Regent Street may be too ambitious in scale to be sound in finance, while projects like Bush House may not be entirely justified by the needs of business. But if they are they may be looked upon rather as exceptions than the rule, and rather as typifying London's exceptional position as a world centre than its more restricted one as the greatest British city.

When we come down to the question of architectural treatment and design all this has an intimate bearing on style. Admittedly, if we built on the American scale our traditional architecture of the past would be of little use to us as a type, but we can conceive no building likely to be required here which would not lend itself to design on lines based on our traditions of the eighteenth century. We have in the architecture of that epoch varying works which afford very wide limits within which every want can be suitably expressed, just as in our smaller domestic problems buildings of an even greater range in date may afford suitable material for suggestion.

We do not see any reason why it is necessary to travel to the waters of Damascus while we have the Jordan near at hand, and believe our modern work would be more interesting and more vivid if our students gave greater attention to suggestions from the wealth of English building of the past, while we altogether discount the efficacy of the attempt to create what is new which is analogous to some modern phases in painting and sculpture.

Our work will be clearly differentiated from that of the past in the eyes of future generations because our requirements will insensibly deflect it. This, it seems to us, is the only manner in which originality worth having will ever be acquired. Such originality is unconscious, and any other but a sham and affectation.

We cannot study planning too much, for it is the most important and fundamental part of design; it is also the direction in which the architects of to-day have achieved most success. We would like to see them less anxious about other branches of design in order that they might concentrate their attention on planning, and we cannot conceive of any better way in which they can free themselves than by familiarising themselves when students with the regional architecture of our own country in order that they may be relieved of too much concern about the lesser essentials of the problems they are attempting to solve. We believe that Professor Richardson is on very sound ground in insisting that architectural students of University College should learn to walk before they attempt to run, and in emphasizing the greater importance of both construction and planning and not on the production of ambitious schemes and the mysteries of rendering.

Our Illustrations.

PROPOSED BUSINESS PREMISES. By Oliver Hill, Architect.

THE WEST NAVE, GLOUCESTER CATHEDRAL. Drawn by W. Eaton, A.R.I.B.A.

TRINITY COURT, CAMBRIDGE. Drawn and etched by J. R. Hutchinson.

DESIGN FOR A MODERN CANOPY BED. Oliver Hill, Architect.

Notes and Comments.

A Good Defence of Concrete.

Mr. Charles Marques, in "The Observer," has written a most excellent defence of concrete construction, of which he says :—

Concrete misunderstood, mis-applied, and more often mis-handled, will build as costly and ineffectively as any other material, and as architects, corporations, and builders have, through the scarcity of brick, rushed into the use of concrete, without previous experience of this material, the result is too often a failure.

There are many systems of concrete construction which can be built as economically and much more effectively than brick, but they require a sound knowledge of concrete as a medium, and of its uses in construction. Concrete houses of artistic appearance and excellent construction are being built at much less cost than brickwork. A recent suburban contract for a housing scheme, of over 100 houses, has just been decided upon at from £25 to £35 lower cost than brick. And this in the vicinity of brick-fields. Further, it will not be necessary to cover externally or rough-cast the whole of the walling surfaces with cement plaster (which is really a thin layer of concrete), as is usually done with brick houses of the same type. It is always amusing to read of objections to concrete when one remembers that most of the paving used in the cities of to-day is of this material, and that thousands of houses are stuccoed over with concrete, to save the poorer brick from atmospheric abrasion.

Brick is certainly a handy unit, and has existed in some climates "since the days of Pharaoh," yet something has to be said for the mortar (concrete) which holds the bricks in place. There are many concrete blocks in the Pyramids, and concrete aqueducts constructed in 800 B.C. are still discharging water into the Tiber at Rome.

No, modern concrete is arriving, and, plain or reinforced, will eventually be known as the best constructive material yet utilised. That it requires a scientific knowledge in its manufacture and construction need not deter those interested in the matter, who should not accept the opinions of any isolated writer, but obtain the advice of experience.

We can endorse all that is here said. The charges made against concrete are almost always based on its improper employment by the inexperienced. In addition, its cost has been often unduly enhanced by the unwillingness of workmen to take advantage of the possibilities it affords for more speedy building. It may be said that if we want

to make a concrete wall cost as much as a brick one, our task is easy; all that need be done is to "go slow," and this is frequently what has been done!

The writer is, of course, incorrect in referring to mortar and rough-casting as a form of concrete, but such "terminological inexactitudes" are to be looked for in the expressions of those who do not belong to the technical professions. We look forward to seeing concrete very much more frequently employed in the future than it is now.

Mr. Bligh Bond and Glastonbury.

The decision of the Dean of Wells on behalf of the Trustees to invite Mr. Bligh Bond to take charge of the remains of Glastonbury Abbey is coupled with what seems to us to be an absurd stipulation, that the appointment "does not imply any permission to proceed with further search for treasure, either suggested by antiquarian knowledge, divining rod or psychic revelations." Either the Dean must have faith in Mr. Bligh Bond as an architect and antiquarian or not. If he has, it is absurd to prevent his using his knowledge and skill; if not, the appointment should not have been made. As for psychic revelation we read Mr. Bond's book, "The Gate of Remembrance," with considerable interest. The processes described seemed to us to be dull, and the information conveyed, fragmentary. But whether Mr. Bond's imagination tricked him, or whether he actually "lifted the veil"—we believe this to be the expression—in Mr. Bond's case the method worked, and important discoveries were made. It seems to us under such circumstances wisest to let Mr. Bond take his own line and employ his own methods—always assuming he is the right custodian for Glastonbury. The Dean can hardly believe that Mr. Bond's psychic visitors will "unloose powers of evil hitherto unimagined," and the old distinctions between black and white magic seem to us unimportant. We look upon it as churlish to couple an appointment with stipulations which tend to eliminate methods by which Mr. Bond has produced tangible results. It would be a very different matter if Mr. Bond endeavoured to found under the *ægis* of the Church a school of psychical research.

The Heating of Houses and Common Sense.

An ingenious correspondent of "The Times" writes about the lost art of heating, and deplores the fact that we do not heat small houses on the Roman system as applied to their Baths and other public buildings. We wonder whether the comparative sizes of the small house and the Baths of Diocletian have ever been considered by the writer, or whether it has ever occurred to him that hot-air flues in floors cost money and that the crux of small house building is its present cost? If this critic of our efforts is really interested in the subject, and has not used it merely as a means of getting a letter published in the columns of "The Times," it might be worth his while to study the hot-air system with which most small American frame houses are heated, which, though it has the disadvantage of drying the air, as many think, to an unpleasant degree, is yet the cheapest method of central heating which has been evolved. We would also recommend him to examine and try to understand the countless systems of gas and hot water heating now on the market, and if he did so we think he would withdraw his remarks about the "lost art of heating," for more efficient and serviceable systems are now available than in any previous period of the world's history.

Demolition in New York.

The American "Architect" calls attention to the coming demolition of Madison Square Garden in New York, one of the outstanding and most striking features of the city. It says:—

> The proposed demolition of the Madison Square Garden, and along with it Stanford White's beautiful campanile, topped by Saint-Gaudens' Diana, is discussed in a recent issue of the New York "Herald-Tribune." "Architecturally speaking," states this editorial, "the city of New York is cannibalistic. It devours its children of brick and stone." Continuing it is stated:—
>
> "In the sacred name of progress it tears down to build up, and in the tearing it destroys some of its most precious landmarks. Witness the fate of the old Parkhurst Church on Madison Square. That, when it passed, left in a sense some slight wrack behind. The superb pillars now adorn, we believe, the façade of a Hartford bank. But the building is gone and others are gone, too; so many that it is painful to enumerate them. We suppose it is only a question of time when the sounds of demolition will come from Herald Square and the lovely building which Fra Giocondo inspired Stanford White to design will disappear like the dream of grace that it is. Already they are scheduled to make themselves heard at the Madison Square Garden in 1925.
>
> "Much has been said about the possible salvaging of part of that picturesque edifice, and it is earnestly to be hoped that a rising volume of interest in the subject may lead to some constructive action. The likeliest project is that which would move the tower to University Heights. When the architects of New York University, McKim, Mead & White, made plans for its extension they contemplated a tower on the graduates' end of the development which would balance the scheme and form a pleasing contrast to the dome at the southern end. The Madison Square tower would go ideally into the ensemble. So thinks the chancellor of the university, and the architects of the country would surely confirm him. They would approve the idea for its own sake and for the assurance it gives of the preservation of a beautiful monument.
>
> "Heavy expense would, of course, be involved, but that in a city like New York should not prove an insuperable obstacle. Probably if the architectural profession were to take up the idea public opinion might be enlisted on the side of some practical plan. In any case, if the tower must go, one more sacrifice to the city's growth and to the immutable laws of change, we trust that the Diana atop of it may be saved. The late Augustus Saint-Gaudens made that exquisite appurtenance to the building, its climax, its *panache*, a pure labour of love. It is, if we are not mistaken, the only nude he ever modelled, an incident in the evolution of his *œuvre* that is unique. He and White took immense pains with it. When the first figure in beaten copper was put in place and found to be unsatisfactory in scale they substituted the present image at their own expense. It is a characteristically beautiful example of the great sculptor's art, and it is besides a thing as familiar to New Yorkers as Saint-Gaudens' 'Farragut' standing in the square below. If this exceptionally interesting work of art is not salvaged and given a new lease of life at some appropriate spot the city will have failed in a duty."

This advice is sound. We are too apt to disregard the value of our architectural heritage to fail in its conservation. Moreover do we too often ignore those traditions that should be sacred. It is, of course, unfortunate that the Madison Square Garden is to be razed. If it is to be, the suggestion of the "Herald-Tribune" is a good one. The beautiful porch of old St. Bartholomew's has a new and fitting place in the new church. The fine portico of the Madison Square Church is, as stated, preserved in another building. It is equally desirable that Stanford White's tower and Saint-Gaudens' Diana find equally safe harbourage.

The changes which take place in New York suggest quick time performances and rising site values, and the difficulty of finding room for expansion within the narrow confines of Manhattan Island give to all buildings erected there an element of uncertain duration.

St. Paul's Bridge.

The Royal Fine Art Commission, who were instructed on May 22 "to inquire into the æsthetic problems connected with the proposed St. Paul's Bridge," observe at the outset of their report that their terms of reference preclude them from dealing with three crucial aspects of the subject—namely, the engineering treatment of the bridge itself, finance which affects the Treasury to the extent of £866,000, and with traffic.

The Commission expresses the opinion that the safety of St. Paul's is the most vital of the many difficult questions raised by the proposal, and were it not for this fact they would have recorded an opinion of disappointment that the proposed bridge should not be built on the axis of the southern transept.

They think it unnecessary to comment on the proposed design or to amplify analogous arguments since all considerations of access, construction, town-planning, and

JACOBEAN OAK CANOPY BED.

vista are subordinate to the central and all-important risk to the Cathedral structure. The piers supporting the dome are in a precarious condition; serious fears have been entertained as to the safety of the dome itself. The Dean and Chapter have had to appeal for £170,000 to carry out urgent works to maintain the building, and, after several years' work upon the piers, are satisfied that their obligations are by no means attained.

The dangers of increasing motor traffic are emphasised and the Commission are of opinion that any further risks must be eliminated until the safety of the fabric of the Cathedral is ensured by additional reparation works, as shaking of the building may lead to catastrophe.

The report, which is dated July 8, is signed by Sir Reginald Blomfield, R.A., Mr. D. Y. Cameron, R.A., the Earl of Crawford and Balcarres (chairman), Marquess Curzon of Kedleston, Sir George Frampton, R.A., Mr. J. Alfred Gotch, president of the Royal Institute of British Architects, Sir Edwin Lutyens, R.A., and Mr. Thomas Mawson, president of the Town-Planning Institute.

The Earl of Crawford and Balcarres, in a note, states that owing to the illness of Sir Aston Webb it has been impossible to obtain his signature to the report.

Mr. H. G. Wells on Mr. Wheatley's "Little House."

Mr. H. G. Wells has written an admirable article on Mr. Wheatley's "Little House" for the "Westminster Gazette." We should have much liked to give this article, but, unfortunately, it is copyright throughout the world. In Mr. Wheatley's scheme Mr. Wells sees the perpetuation of the unimaginative past which will condemn future generations to lifelong drudgery. Mr. Wells says there was nothing to prevent the Labour Party whose experts in housing are framing up schemes to build pauper houses and endow the building trade at the public expense a lead towards better things. Mr. Wells thinks that the whole population of industrial London could be rehoused in fine and handsome apartment houses with night and day lifts, roof gardens, and nearly all the conveniences to be found in a Kensington flat at hardly greater cost than would be necessary to choke all the ways out of London with Wheatley hovels. Mr. Wells, as we should expect, is opposed to the individual small house, and we think quite rightly if the object aimed at is to save labour. If, as we are frequently told, the idiosyncrasy of the Englishman is such that he demands isolation from his fellows, his wife will probably always have to do many "chores" which might be obviated by schemes of a communal character. The adoption of labour-saving devices may help, but they will do no more than slightly mitigate our troubles. Mr. Wells says that women since their emancipation have demonstrated how utterly unimaginative they are, and in nothing more so than in the housing question, a matter which primarily concerns them.

We hardly like to suggest a flaw in an article with the substance of which we so largely agree, but think that if he had some practical experience of the present difficulty of building flats to pay a return even in most favourable circumstances, he would be less optimistic about what could be done in the way of communal housing, but for all that we believe it to be sound in principle.

MILFORD.—In connection with the proposed sanatorium to be erected at a cost of £80,000, the Surrey County Council have now fixed the remuneration of the architect, Mr. Sydney Tatchell, F.R.I.B.A., at £4,000, with an additional £1,000 if and when the Council decides to extend the accommodation by the erection of an additional block of 100 beds. The Ministry of Heath have given the Council to understand that the deficiency in housing and in the supply of labour and materials will not be allowed to prevent the immediate erection of the sanatorium.

NEW SHOREHAM CHURCH, SUSSEX. Sketch by RUTH COBB.

OLD SHOREHAM CHURCH, SUSSEX. Sketch by RUTH COBB.

An Ancient Port.

SHOREHAM, IN SUSSEX.

By Ruth Cobb.

SHOREHAM BRIDGE.

The long line of the South Downs facing the English Channel is broken in one place by a wide valley through which a river winds slowly to the sea. This river must have seen many changes along its banks. On the summits of the downs close by are the remains of early British camps, and it is known that the Romans had fortifications and used a harbour at the foot of these downs. It was formed probably by the mouth of the same river, but it is supposed that it flowed into the sea a good deal more to the east than it does to-day. The course of this river, called the Adur, has altered several times. Once the harbour extended right up to what is now known as Old Shoreham, and the biggest vessels of mediæval days were able to come up there. In the reign of Edward III Shoreham furnished 26 ships for the fleet that was to besiege Calais—two more than London. By the eighteenth century the old harbour was unusable owing to the shifting of the bar, and so the port was moved to the new mouth of the river and a fresh town sprang up and was known as New Shoreham.

It is certain that Shoreham, or Soreham as the first name seems to have been, was in early days of much importance and in favour with kings. It is said that Ella, the first King of the Saxons, landed there. King John disembarked there when he first arrived in England after his accession, and it was from Shoreham that Charles II embarked in his flight after defeat at Worcester. But although much has changed and passed away, many signs are left of the Norman occupation of this land. Two beautiful churches still stand at Shoreham, giving evidence of the great skill of the builders of those days.

After the conquest Shoreham was the port from which the chief intercourse between Normandy and England took place, and William gave to William de Braose the town and the surrounding land, as well as the lordship of Bramber, higher up the river, where he built himself a castle. It was William de Braose who founded the two churches and who afterwards presented them to the Abbey of Saumur. Old Shoreham Church was built first, the other a little later, probably about A.D. 1100. It stands above the river bank by the picturesque timber bridge. Built in cruciform shape, it must at first have been very dark inside, for the nave had no windows, though two smaller ones were added in later times.

Some beautiful arches support the tower with fine

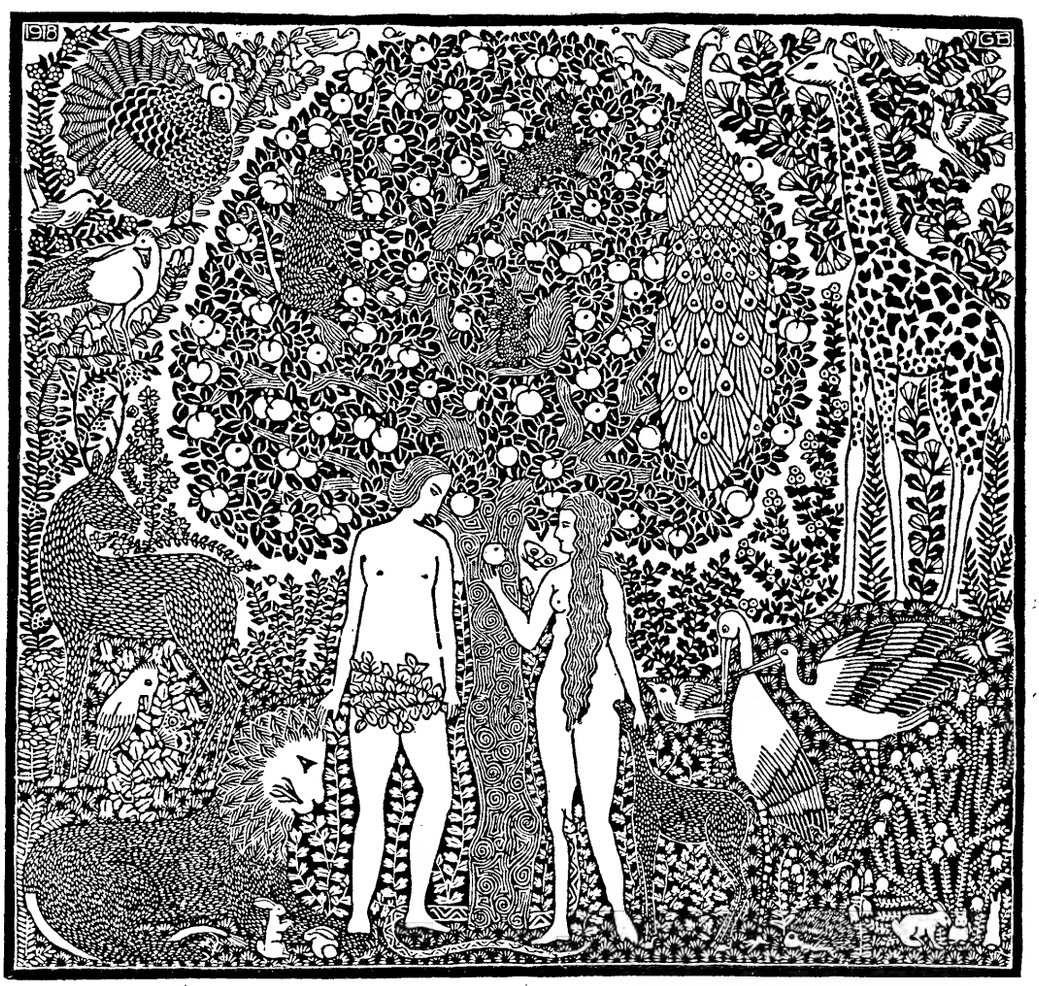
SOMPTING CHURCH, SUSSEX. Sketch by Ruth Cobb.

designs on their curves. The carving of the capitals of the pillars was obviously the work of a humorist: quaint faces are introduced into the designs and also at the base of the Norman arches. Whoever he may have been, he was a master of design and well chosen for his work, perhaps by the first priest in charge, known to have been called Anfred and to have been there in 1150.

Joined to the square tower with its beautiful Norman arcading is a smaller square tower, perhaps used for look-out purposes. A similar tower is to be seen at North Lancing Church, a couple of miles away, a church of the same date, but which has unfortunately been badly restored. Specially to be noticed at Old Shoreham are the early windows at the end of each transept, which have an unusual design in the stone work outside, and there is a tie-beam inside carved in dog-tooth pattern rarely seen in wood. The chancel in its present form is much later than the rest of the church. New Shoreham Church, a mile away, is a more imposing building, with its high tower and flying buttresses; at first it must have looked like a cathedral, for it was twice its present length. The part that stands is composed of the transepts and chancel of the original church. On each side of the present entrance can be seen two of the Norman pillars of the nave which now form part of the west front. The transepts are the oldest portion; the arches are beautiful that support the tower and of very simple design. The chancel is mostly transition and early English, but in both the aisles there is Norman arcading of unusual design, and there is a Norman font still in use. The church is impressive by its very bulk, as it stands in its churchyard surrounded by trees and the low houses that have sprung up round the present harbour. New Shoreham is not a busy port like Newhaven, only a few miles away, which is now one of the lines of intercourse between England and Normandy, but small trading vessels come in there and during the war it was busy. A certain mystery ship was built in the harbour, but never put to any use.

A few miles away stands a church, part of which, the tower, was standing before those of Shoreham were built. This is the church of Sompting, known in Norman times as St. Mary of Suntinge and, like the others, was also in the gift of William de Braose. There are some Roman bricks to be seen in the base of the tower, which has a four-gabled roof, a rare shape for Saxon towers in England. The top part fell in a few years ago, but it has been so well restored that it does not offend the eye in any way. The rest of the church is mostly Norman and early English.

These churches, lying along the foot of the South Downs, tells us something of the past. Although we know little of the actual lives of those that worshipped and those that built there, yet by their work, which we admire and wonder at to-day, we realise their great sense of beauty and that they felt "joy in the making." RUTH COBB.



THE WORK OF A STUDENT, AGED 14½, IN AN AUSTRIAN ART SCHOOL.

The decorative talent and appreciation in this young student's work is of undeniable quality. The representation of Adam and Eve in the Garden, surrounded with many specimens of the animal kingdom in positions of repose, is intended to illustrate the sense of peace before man's fall from grace. The whole composition fills the allotted space very admirably.

Correspondence.

[The Editor will not be responsible for the opinions expressed by Correspondents.]

The Specialist.

To the Editor of THE ARCHITECT.

DEAR SIR,—It was with considerable interest I read the article entitled "Specialists," reprinted in your issue of the 15th inst., from the A.S.A.P.U. Journal.

On the main point in question, however, I am at variance with "Chief Assistant," namely, that the architect should possess the ability to check reinforced concrete or steelwork designs to ensure that the work submitted is in accordance with the conditions laid down.

In the first place, if an architect possesses the ability to check "Specialists'" designs, one must assume also that he possesses qualifications at least equal to those of the specialist.

If this is granted, it follows that the architect is in a position to prepare his own steelwork drawings, etc., upon which firms could be asked to give competitive prices.

Can such a course be commended?

The only sure method of safeguarding the interests of both client and architect, and to me this is the essential point underlying the whole question, is to adopt one of the two following propositions:

Either the architect should obtain the consent of his client to the employment of a practising chartered engineer, who would prepare all calculations and drawings required and obtain tenders, or, if circumstances permitted, to follow the lead given by our American confrères and retain an engineer, possessing recognised qualifications, as a member of his staff.

In either case, the many structural difficulties arising, especially in the initial stages, could be overcome more easily as a result of the intimate co-operation existing, and tenders could be obtained, strictly on the same basis, as identical sets of drawings, etc., would be issued to each firm.

Tenders prepared and submitted upon drawings and calculations made by competing firms are, for obvious reasons, liable to prove unsatisfactory, the tendency being to underestimate the area and weight of metal required to absorb the stresses, in order to reduce the cost of the work and so secure the contract.

The incident cited in the article might well be a case in point. It undoubtedly justifies, more often than is usual, the engagement of an engineer.

Personally, I think the architect is well advised to leave the calculations involved in designing reinforced concrete and steelwork for modern buildings to one who is temperamentally better suited to undertake such work.

That a sound knowledge of the fundamental principles of mechanics is necessary to the architect I make no attempt to deny, because their application, whether made consciously or sub-consciously, is essential in all structural design, whatever the material employed, for they assist in the determination of architectural form.

Neither do I attempt to deny the advantage to the architect in being able to apply simplified formulæ in certain minor and isolated cases.

What I do maintain is that acting in the capacity of architect, his qualifications are better employed in other directions than in attempting the solution of reinforced concrete and steel problems met with in our modern structures, such as those I gather "Chief Assistant" had in mind when writing.

The whole question from the point of view of the embryo architect's education is too complicated to discuss here.

The opinions expressed above no doubt will meet with a certain amount of criticism and disapproval, yet in actual practice the efficacy of the former, at least, of my two propositions is undeniable whenever adopted.—I am, yours faithfully,

ROMILLY B. CRAZE.

"The Small Architect."

To the Editor of THE ARCHITECT.

SIR,—There seems to be a quaint analogy in the text of the contributions, "A Menace to the Small Architect," by Charles H. Craik in your issue of August 1, and "Outspoken Letters of a Young Architect," presumably by "B.," in your issue of August 15, which inclines one to think that the latter writer, if he should come across a "thinking" client, will soon be swallowed up in the menace Mr. Craik so ably portrays.

Surely there is no doubt that the viscissitudes of the architectural career are made by architects themselves? I speak as one who has worked with and for many of those who are fairly well established in the profession, and even I would greatly resent a youngster trying to superimpose his ideas on my own.

One cannot help feeling a great deal of admiration and respect for the masters, but every young man who is articled to a firm of architects is not necessarily going to become a Wren. Then, too, how very few of the younger type of architects know anything about the practical side of the profession?

Many young architects who set up on their own lack sympathy, particularly for the builder, and for some unaccountable reason imagine all builders to be their natural enemies—quite a mistaken idea.

The small architect, like the small man in every walk of life, must seek his practice with discrimination, and not eschew the learning of the man at the board, even if he be in the builder's office. Architects, like all genii, are born, not made. Therefore it is quite possible for them to be born up a side street and have to seek their bread in the builder's office, where there is so much to be learned.

How many embryo architects are there at work on the board, the bench, or even the lathe? Some, too, are probably laying bricks.

Not many weeks ago the writer saw in a contemporary journal the plaintive appeal of a young carpenter who wanted to become an architect, and sought the way to "get there." My advice to this young man was to forget that he had ever been a carpenter and go back to school, for as things now are the profession abhors the artisan. But what a pity!

HAROLD REG. LATHAM.

"Mytchket," Bomere Heath, Salop.
August 29, 1924.

A Menace of the Small Architect.

To the Editor of THE ARCHITECT.

DEAR SIR,—I have not been able to realise many points in the article you published under the above title, in your issue of August 1. I should very much like to know what the writer exactly means by the following sentence: "If anyone wants to build a house to-day, he can avoid the expenses of architectural services by purchasing a copy of a set of drawings that are broadcasted and printed in thousands by enterprising newspaper and other firms. I may be very ignorant, but I have never seen any plans published in such a state as would be accepted by the local authorities. Most of the reproductions that are published are by virtue of their reduction not true to scale.

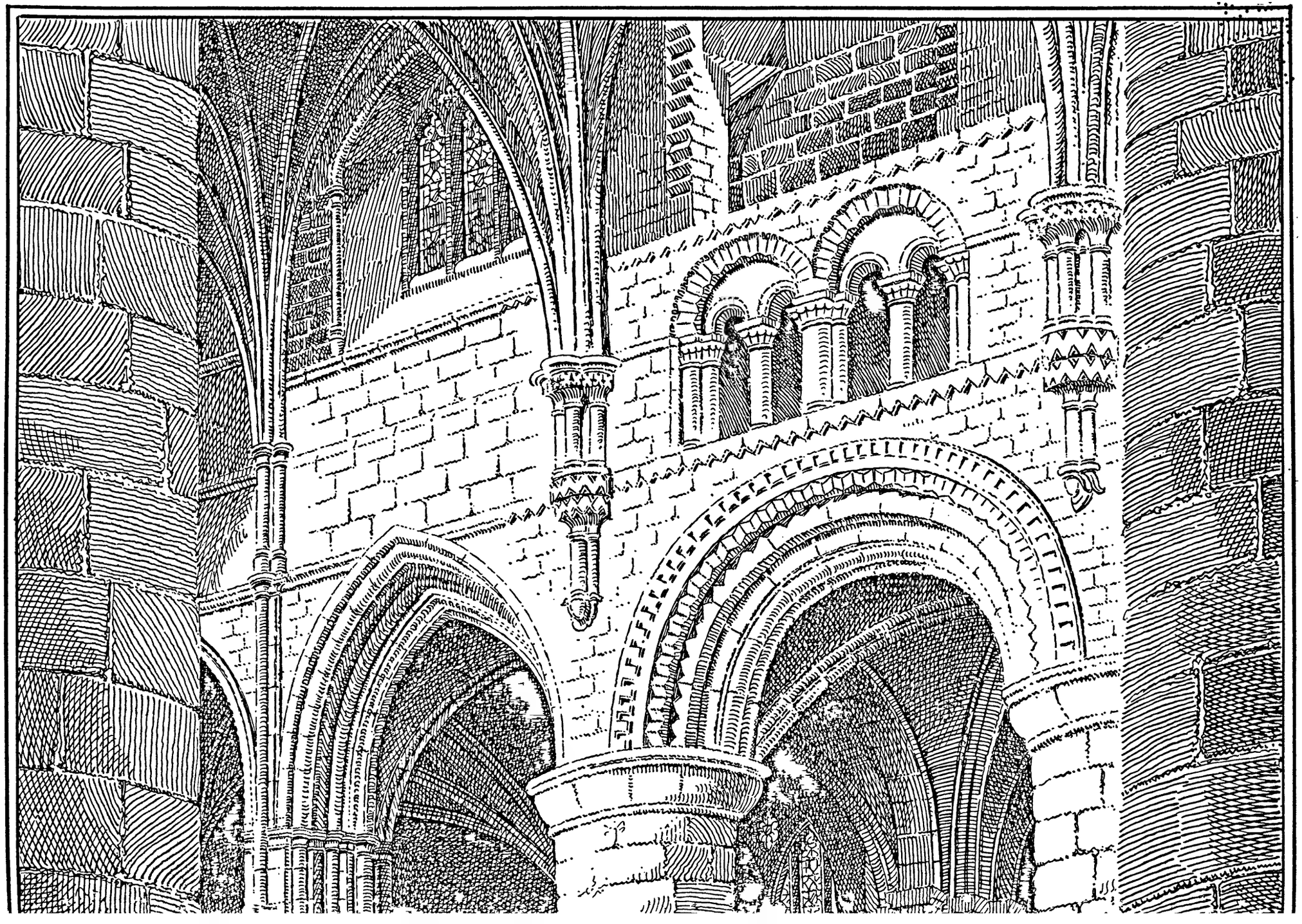
Further on in the article the author writes, "and although the houses may not be exactly what is required, there is such a wide range of designs available that approximate requirements can usually be suited." What does the writer mean by this sentence? Does he wish to infer that a client who has no knowledge of drawing can in some mysterious way adapt, without skilled assistance, sets of drawings that have appeared in the Press, either in books or periodicals. Again, he complains of the fact that legions of builders employ draughtsmen who are only paid probably £3 to £4 a week to prepare plans for the needs of the clients. Surely these draughtsmen referred to must possess some ability and understanding; they must also be well acquainted with the local bye-laws. It is unfortunate that they are paid only between £3 and £4 a week, but this to my way of thinking does not bar them being called architects in a small way.

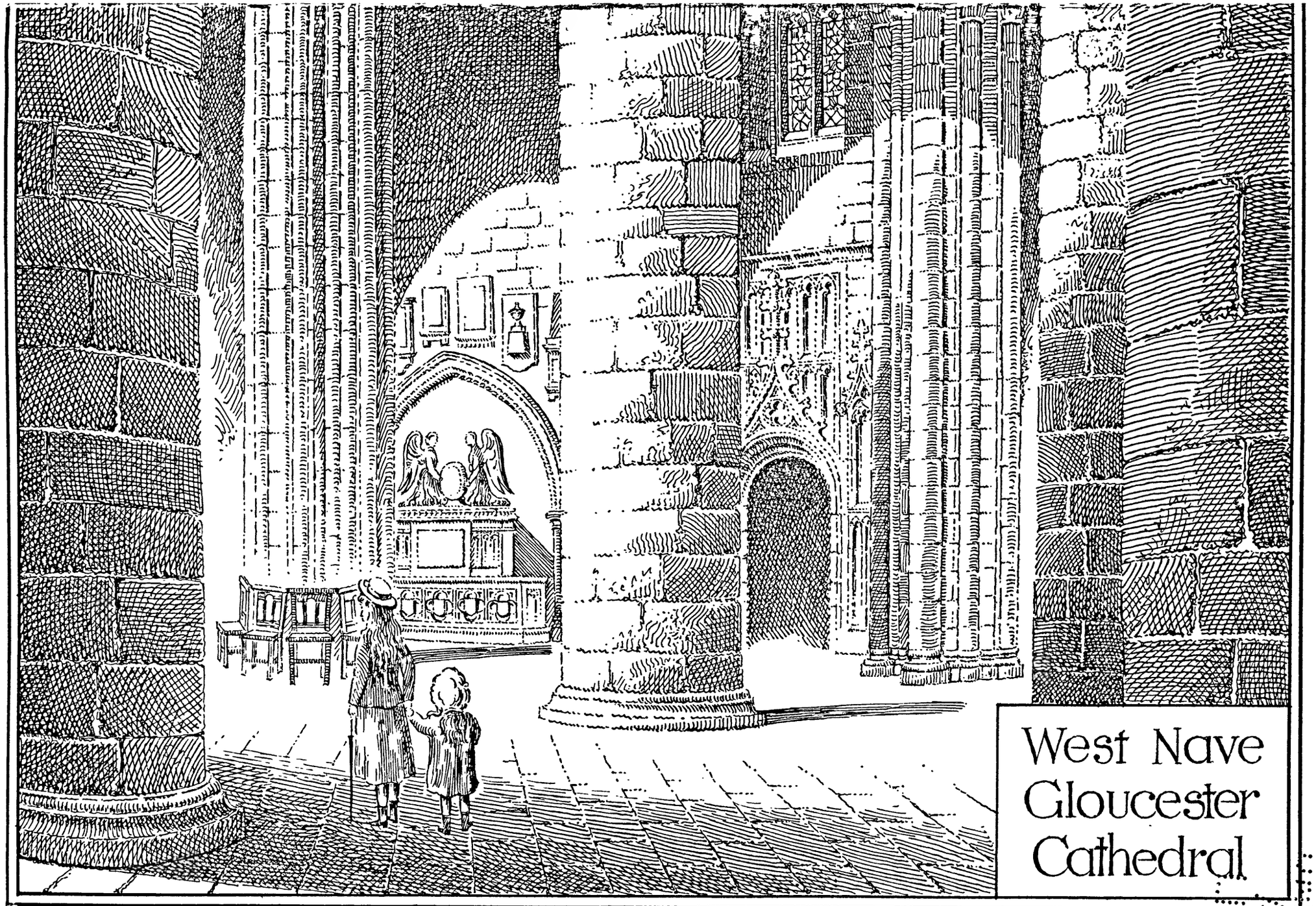
If a client can be satisfied, I see no reason why "rough and ready" drawings should not suffice. Good architecture does not mean the difference between "rough and ready" drawings and a complete and elaborate set. Good architecture consists of good designing all the way through.

The author continues as follows: "and too many local authorities encourage this state of things, and will pass anybody's drawings irrespective of their architectural merit, so long as they are legible and conform to their bye-laws." Such a statement opens up a very wide field of differing opinions. What is architectural merit? And is it reasonable to expect the local authorities to be able to discriminate? Let us suppose they are in a position to judge, and it is correct and proper that they refuse to pass plans that do not conform with their standard of architectural merit, I can well picture to myself that the troubles of the architect would be much worse than they are are to-day.

The best way for those who have had a long and expensive training is to show by their ability and manners the advantages to be obtained by employing them.

With regard to the publicity of plans and elevations I recently told a well-known architect that if there were no professional Press there would be no profession of any consequence; he did not believe me. Where would the modern architect gather his





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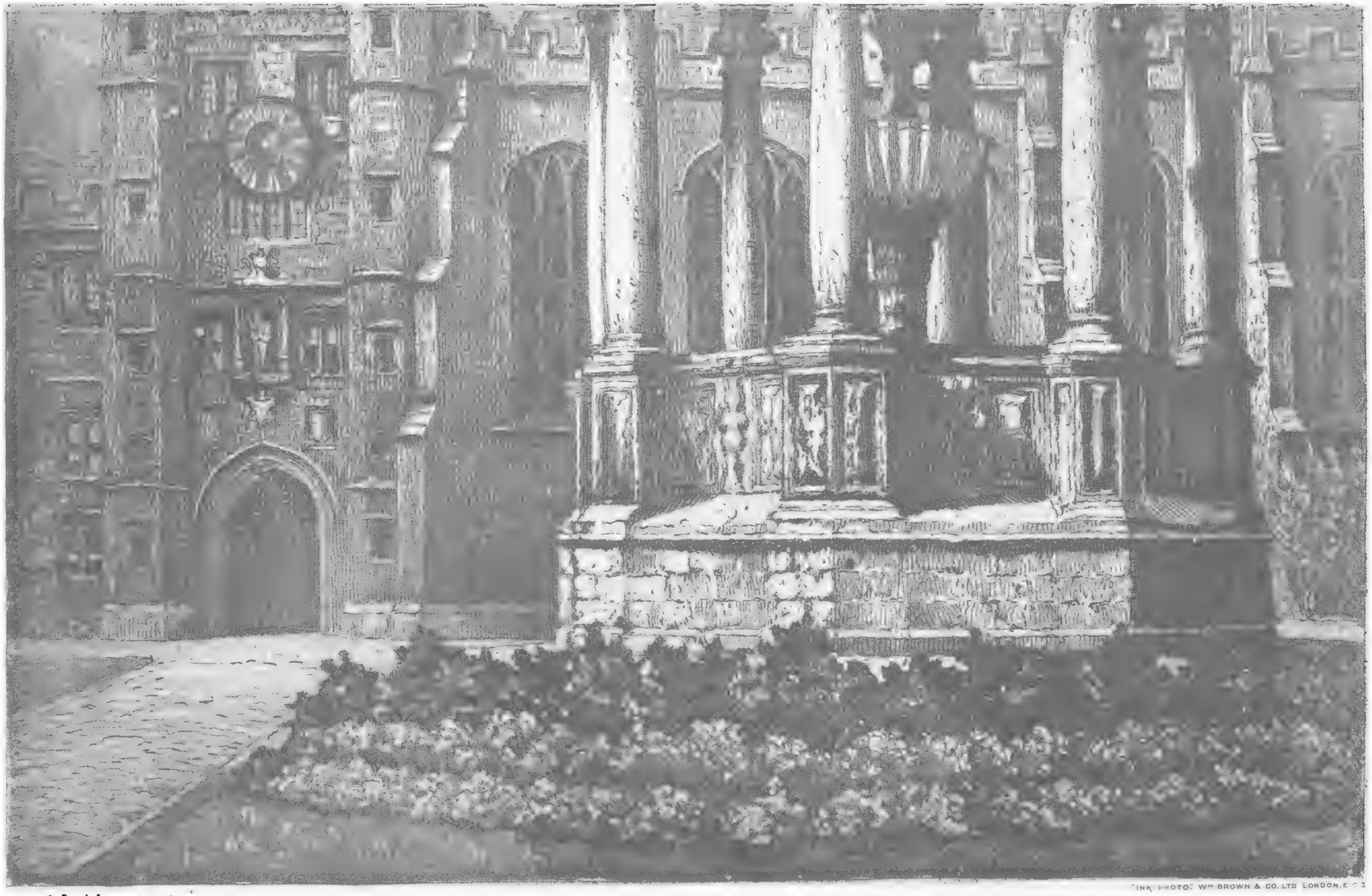
THE WEST NAVE. GLOUCESTER CATHEDRAL.

DRAWN BY W. EATON, A.R.I.B.A.

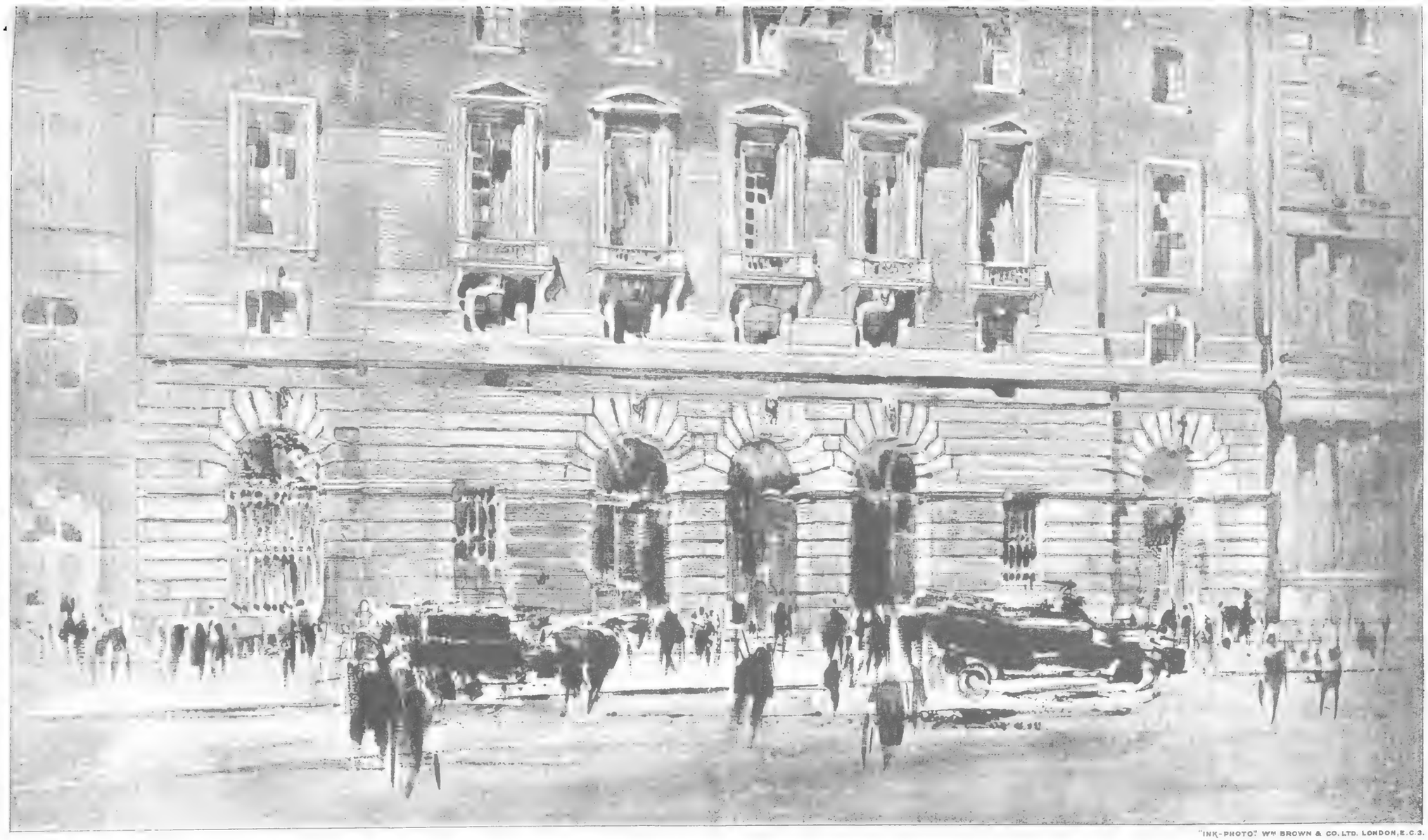


INK PHOTO WM BROWN & CO. LTD LONDON, E.C.3

J. R. Hutchinson

TRINITY COURT, CAMBRIDGE.

DRAWN BY J. R. HUTCHINSON.



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PROPOSED BUSINESS PREMISES.

OLIVER HILL, ARCHITECT.

ideas and knowledge of the work of contemporary men if there were no publicity of drawings and plans ? To-day a man can be a first-class modern architect, and yet live in the most distant and unfrequented parts of the world, and this is only accomplished by virtue of books of reference, and the professional Press. If these did not exist, the effect on progress would be quite unthinkable. I am certain the injury inflicted on the small architect by the publicity of a few plans is far and away outweighed by the advantages that this publicity offers to the whole race. In every sphere of life the unfit must be driven out, and the architect who would be successful must apply himself to his work. It is quite useless to appeal to the Professional Societies for assistance, in matters connected with the actual procuring of clients.

With regard to what your author states about the successful architect, I do not think he can possess any real knowledge of human nature. I would like to ask him to define the state when an individual can be classified as one of the bigger architects, and also under what circumstances a professional would be willing to be one of the rank and file. Architecture is a very uncertain profession ; it is hardly ever possible to know whether you are going to be fully occupied for the coming year, or whether you are going to be very hard up indeed. It is quite impossible for a successful man to help in any more tangible way than by gifts to the Benevolent Fund.

If a client wishes to have his house built by a certain architect, the professional is almost obliged to accept the work ; he cannot inform his client that he would prefer to recommend one of the rank and file of architects. Supposing he did recommend a colleague, and his work did not give satisfaction to the client, how very uncomfortable the position would be for all parties. On the other hand, if the individual recommended were to be a great success, it is quite likely that his success would make very considerable inroads into his patrons' practice. It would be a splendid world if everybody were perfect ; as it is merit and ability to handle clients brings the only success that can give the architect complete satisfaction.—Yours faithfully,

PHILISTINE.

"The Architect" Fifty Years Ago.

AUGUST 22, 1874.

ARCHITECTS' ESTIMATES.

The data upon which an approximate estimate is based are, in nine cases out of ten, the cubic contents of the building as designed. If these are carefully and completely taken they form a good basis for such an estimate, but they must be thoroughly measured, and though they may be grouped into different totals, if there are parts of the building which are to be more highly finished than others, the contents must be in all cases taken with precision, and upon a definite system. When, however, this has been done the real difficulty of an estimate by cubing begins. The unit is so small compared with the bulk of any ordinary building, that even a farthing per foot more or less represents a large sum of money, and consequently, unless the price be arrived at with great judgment, the results of a cubed estimate will fail of accuracy. There is, of course, no other method of fixing a price except ascertaining the price per foot cube at which other buildings of corresponding quality and materials have been recently built. In applying the price so obtained it is necessary to see that the two buildings are sufficiently similar for the one to be a good guide to the cost of the other ; and this in all respects, for the difference between a dear neighbourhood and a cheap one, a London contractor or a country builder, a keenly contested competition and a schedule of prices submitted without any competition, will suffice to occasion enough variation in the total to vitiate what might promise to be a sound comparison. Cubing has also been an unfaithful guide of late years on account of the rapid alteration in the prices of labour and materials which has recently taken place. It is commonly admitted that in some localities this has reached as much as 50 per cent., yet very few persons who carried out a building of a special description some years ago for 6d. a cube foot would have the courage, if they were making an approximate estimate for similar work at the present day, to price it at 9d., which, however, ought to be done in any locality where the advance has been such as we have named.

Another and often a serious cause of difference between the calculated prices per cube foot for an intended building and the price which it actually comes to occurs when the work of one architect is taken as a guide in estimating that of another. Astronomers have long learned that in making use of the notes taken by any practised observer they must commence by applying a " personal correction," each man being habitually more slow or more quick than his neighbour, and that in an almost uniform ratio. The same sort of consideration makes the work of one architect more or less costly than that of another without its being intended. If one, for example, habitually employs one-brick internal walls, inch floors and finishings to match in the same buildings for which another would specify brick-and-a-half walls, inch-and-a-quarter floor, and so on, the difference would mount up to a very sensible percentage. Lastly, and by no means least, the temper of mind of clients occasions a great variation in the cost of similar buildings. If while A is constantly insisting upon it that he must have the best which money can afford, and on any occasion when a choice is offered him uniformly selects the most solid and consequently the most costly mode of doing the work, B steadily adheres to it that his stipulated limit of cost must not be infringed upon, and makes that his first consideration, the result, of course, will be that, bulk for bulk, the building commissioned by A will cost more than that of B, though, of course, the more costly building will at the same time be the most complete.

Steyning.

The village of Steyning, pleasantly situated in the South Down country of Sussex, is remarkable for the variety of its domestic architecture. It is an ideal spot for the student on a sketching tour and it also possesses a massive Norman church of great beauty. All along the road from Brighton to Fittleworth there are similar villages which will provide endless subjects for the sketch book or camera.

Sincerity.

It is frequently very awkward to be sincere. All men dislike the candid friend, and in consequence the sincere man is often in a very difficult position. Men meet each other, one is filled with some subject which for the time being commands his whole mind. He is eager for sympathy and confirmation in his theories. He expounds these to his friend or acquaintance in a full blast. The friend is frequently not in the least interested, he desires to catch a train, or he is occupied in some totally different line of thought. True, he is not called upon to argue on the subject ; his rôle is to sit and listen, nod his head at the correct time, and, if he is a tactful, peace-loving man, he will say at the end : " Yes, I certainly do agree," or " How interesting ; you have my support." " You ought to write to the Press about it." They eventually part, the one very well pleased with himself, and his friend the other determined to forget all about the subject as soon as possible. But unfortunately, those simple utterances, given in the spirit of good-natured inattention, almost certainly lead to trouble. The telephone bell rings next morning, and the well-known voice at the other end is off again in full blast. " You remember what I spoke to you about last night, how you said you agreed with me and thought I ought to send it to the Press ! Well, I took it to an editor friend of mine, and he thought it very good, and would be glad if you would write a letter to the journal on the subject. You will, won't you " ?

You have only vaguely remembered the subject. You recollect that your friend poured forth a full blast of enthusiastic eloquence at a high speed. You do not remember ever having said you agreed with him. This phrase you so often use to get rid of bores that you cannot be expected to remember. But, here you are at the telephone, called away from a very vital business transaction, you have not got the moral courage to decline, so you say yes, but send me along some particulars and details. By the next mail the particulars arrive and you realise that you do not agree with them one little bit. Again, you have not the courage to openly tell your friend the truth. You write a non-committal letter which pleases nobody, which disappoints the man you had so unthinkingly led into believing you were really interested. You have not been sincere. Why not ?

Book Reviews.

"Parish Church Architecture," by Tyrrell-Green. S.P.C.K. 8s. 6d. net.

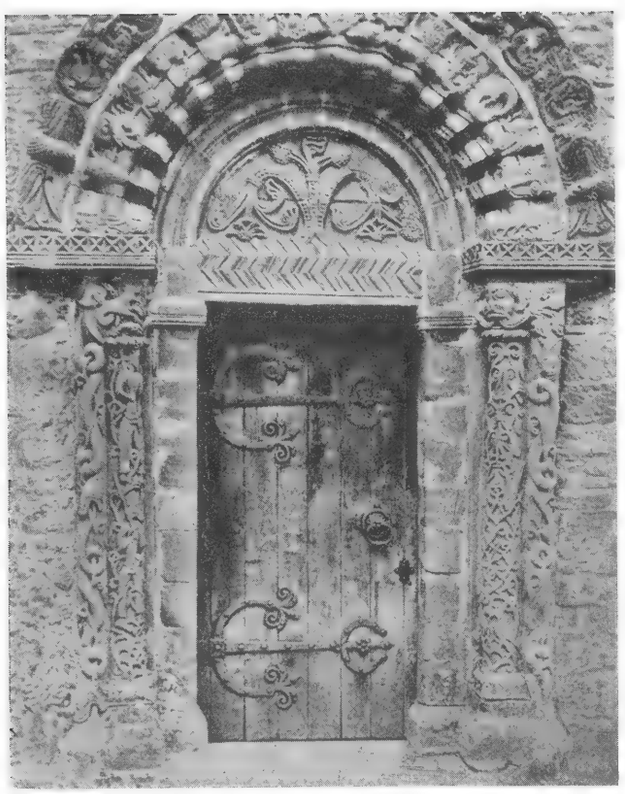
This book, taken as a whole, is very good indeed, and should be a help to architects, architectural students, and all laymen who are interested in architecture. After reading the volume most carefully, I thought that I could give the best idea of its value, as a reference book, if I mapped out a tour in a certain county and gave our readers an idea of the valuable and instructive information that the author gives to all parties who might be tempted to undertake such a tour. I selected the county of Sussex, for no special reason except that I have always known that Sussex is very well supplied with parish churches of many different periods. But I am convinced that any other tour would supply, in all probability, just as instructive examples of English architecture. The programme starts by motoring down to Worth, via Redhill, Horley, Pounds Hill. After inspecting the parish church at Worth, we would proceed via Crawley to Horsham and on to Southwater, West Grinstead, Ashurst, to Steyning. Steyning would be our starting place for the following tour, though the church at Ashurst is of interest: Steyning to Botolphs, to Old Shoreham and New Shoreham. Leaving this last-named place, we would make a short journey out of our circular tour to Southwick and back to Old Shoreham and then on to North Lancing, Sompting, and Broadwater, using Worthing for sleeping accommodation. Leaving Worthing we would pass back through Broadwater on towards Washington, but at Findon we would halt and examine the church and then take a secondary road to Patching, which also possesses a church of interest, and towards the sea by secondary roads to East Preston and on to Rustington. Here a slight difficulty arises, and the time of day would have to decide.

If early we would pass through Littlehampton on to Climping and proceed towards Arundel, via Ford, Tortington. The next day we should travel to Lyminster, that is southward from Arundel, and then retrace our way northward to Burpham. This church must be included in the trip. It might be better when at Rustington to go to Lyminster and Burpham to Arundel, but it just depends on the time of day. Burpham must be seen, and the map gives no indication of a road that would lead across the river Arun. Having frequently stayed at Offham and crossed the river at this part, I have no recollection of a bridge which would enable us to cross the river and thus avoid returning to Arundel. If Arundel has been selected as the headquarters for a night, we will conclude that Burpham has been inspected on early the following day and we retrace our way to Arundel and travel westward to Barkham and then to Felpham, which is close to Bognor. In this district we are naturally attracted to Chichester. There are many parish churches in this district which are of later periods and which might well be cut out of the programme. If we travel towards Chichester we might include Merston, and by means of secondary roads include Aldingbourne, Jangmere and Boxgrove before entering Chichester. On the following day we should run out to Appledram before taking the homeward route past Chichester to Up-Waltham, where a very interesting church is to be seen, and then on by part main and secondary roads to Sutton Church, and still by the same class of road on to Bury and Amberley. Here the day's journey might be completed. It is a very pretty place, the bridge being specially charming, but if preferred one might travel to Fittleworth, Hopham and Pulborough. It all depends on the time spent at the various churches.

From Pulborough, by means of second class roads, we wend our way to West Cheltington and on to Thakeham, and from thence southward to Sullington and on a good road past Washington to Wiston; the latter is reached by a road which branches off the main road some distance out of Washington on the right-hand side. By this same road we can reach Steyning and complete our circuit. Homewards we might include Up-Beeding reach, the interesting church at Edburton, and further on Poynings, joining the main London and Brighton road at Pyecombe. Journeying to London we can include the church at Bolney. It is, of course, quite possible to take these places in a different sequence. The author of "Parish Church Architecture" comments on the churches included in this tour as follows:—

"The twelfth and thirteenth century churches of Sussex Downs and coastland have more in common with contemporary work in Normandy, easy of access just across the Channel, than with the rest of England, from which they were separated by the barrier of the lagoons and forests of the weald."

The church at Worth, the first on our suggested tour, "is an instance of a complete Saxon cruciform basilica plan; some features show indication of being derived from the Celtic plan. It is without aisles, and the original entrances are lateral instead of at the west end, as in the basilica. Old Shoreham Church is a cruciform church, and possesses an almost unaltered central tower in the Norman style. Burpham is an example of Norman cruciform without a central tower. Steyning is a very fine example of an aisled nave church of the twelfth century. In the Romanesque style of Normandy it is not uncommon to find an apsidal chapel opening out of a transept to the east." Actual chapels or obvious traces of the existence of such chapels are to be found at "Old Shoreham, New Shoreham, Sompting, Broadwater, Findon and Burpham." The whole book supplies the architectural features we all love to appreciate, and in reading through the volume it would be found that the inspection of the churches suggested in our tour would supply the student with a very complete history of the growth of English architecture. Sompting supplies an example of Saxon architecture. Norman architecture is to be found at Amberley, Burpham, Old Shoreham, Southwick, Steyning, Up-Waltham. The Transition period is represented at Broadwater, Burpham, New Shoreham. The Early English style is illustrated at Appledram, Burpham, Merston, Tangmere. The Decorated style is represented at Wiston, etc. Examples of the Perpendicular style are to be found at Broadwater, Burpham, Fittleworth, Horsham, Hopham, and Thakeham, Pulborough, Arundel, Poynings. All through the volume the details illustrating the different styles are most graphically described, and we venture to think that all who have any interest in a correct knowledge of the style and history should study this little book carefully and enjoy the knowledge it imparts.



NORMAN DOORWAY, KILPECK.

"Land Value Policy." By J. D. White, M.A., LL.D. (London: 2s.).

The United Committee for the taxation of land values acts as sponsor for this very socialistic and communistic *exposé* of views, with which a large body of Englishmen and Scotsmen are far from agreeing. Quite unconsciously, we are sure, the book is throughout pleading for the destruction of the virile force of ambition. If all the land were nationalised to-morrow, what incentive would there be to improve any portion of it, except there were security of possession? The mere possession of the immediate fruits of toil would be inadequate to promote the continuous cultivation of the soil; for, if after fructifying a certain acreage, the cultivator were to desire to move to another

neighbourhood, he would leave behind him, for the benefit of others, the land made fruitful by his own efforts.

Let it be granted that the slogan "the land for the landless" has a most attractive ring for those who *are* landless—well, so also would the slogan "the shekels for the shekel-less," and such is nothing but a direct incentive towards crime and violence.

Taxation of land-values, the author states, would "improve the prospects of labour." We doubt it. Labour's prospects depend very largely upon Labour's own attitude; if Labour will but learn to respect itself by its willingness to give a fair day's work for a fair day's pay—to recognise the sanctity of agreements—to eschew the policy of selfishness, which is at present so much in evidence—to allow freedom of will to every man, instead of exercising a tyranny over its own brethren—then indeed the Light shall shine forth from the darkness and the glory of Life shall be revealed.

"The reform would also promote the passing of the slums"! Would it? Once again, we must differ. The creation of slums is the work of the individual and collective tenants of a district. How many a well-ventilated small house has been provided, only to be met with the tenant's careful blocking-up of the vent openings by rags! How many a bathroom in a small house has met the fate of being used as a coal store!

The proposed reforms "would raise wages generally." Possibly, but they are at present unduly high; the Government of the day recklessly granted bonuses during the war, and the recipients, not unnaturally though perhaps scarcely patriotically or even honestly, have striven (and too often successfully) to obtain these as a permanent increase to the wage. We have no wish to dogmatise, but is it true, that "the price of the produce determines the rent of the land"? Again we have our doubts.

"To treat the land as common property . . . would also do much towards equalizing its distribution." Never was falser statement made. Make every man equal to-morrow with equal land-rights, and the next day would witness the inequalities created by the differences which human nature provides, and therefore "the distribution of wealth has remained unequal" and will continue to do so, despite all the Socialists in the world.

Though the author is gracious enough to commend a man's enjoyment of the fruits of his own labour on the land, he seems to advocate (perhaps only indirectly) the communistic treatment of the fruits of a man's own brains.

It does not help the author's case to refer to the Levitical laws as to property, for these laws created an absolute and indefeasible right of possession, and were very stringent against the removal of boundaries.

Abraham paid to the Hittite Ephraim the sum of 400 shekels of silver for the field and cave of Machpelah, wherein to bury his dead. This field remained uncultivated for centuries; would it have been just for Abraham and his descendants to pay a land tax for this property? Yes, according to the present-day socialists.

Enough said! The book is undoubtedly well put together from the desired view-point, though should there be a future edition certain typistic and other errors should be remedied, and the very poorly arranged index should be also taken in hand.

Buildings in Progress.

Nos. 62 and 63 Cheapside are so rapidly in the process of rebuilding that it may well be that before this notice sees the light in print the premises will be finished and in occupation. They are being erected as shops and offices, with a red brick frontage and exhibiting five storeys. Messrs. Ashby & Horner, Ltd., are the building contractors, and Marryatt-Scott lifts are being installed.

The corner block of premises, facing in Tothill Street and flanking Dartmouth Street, Westminster, has been undergoing alterations of a somewhat considerable nature. The general contractors were Holland & Hannen & Cubitts, Ltd.; Smith, Walker, Ltd., for steelwork; T. Clarke & Co., Ltd., for electric lighting and power installation; Thomas Faldo & Co., Ltd., for asphalte; Waygood-Otis, for lift; Richard Crittall & Co., Ltd., for culinary equipment; Teale & Co., automatic telephones; Alfred Goslett & Co., Ltd., glass and glazing; Fortis Reinforced Concrete Safe Co., Ltd., for strong-room door; and Samuel Elliott & Sons (Reading), Ltd., for revolving door. The general design of the elevation facing Tothill Street carries on that of Caxton House, contiguous.

A block of business premises, No. 146 Leadenhall Street, now in course of construction is well worthy the attention of the public, by reason of its somewhat unusual treatment of the façade. This displays purple and red bricks, with gauged red bricks for window dressings, and with stone in the labels, balustrades, cornices, keystones, etc. The accommodation is arranged on ground floor and six storeys, the two topmost of these being designed as a quasi-tower with considerable effect. The building contractors are the well-known firm of Higgs & Hill, Ltd.; Redpath, Brown & Co., Ltd., are responsible for the steel construction; the "S.M." Constructional Co., Ltd., are supplying the "S.M." hollow fire-resisting floor construction; Crittall Manufacturing Co., Ltd., for metal windows; Adamsez, Ltd., for sanitary fittings; J. H. Nicholson & Co., Ltd., for heating; Hollis Brothers & Co., Ltd., for wood block flooring; Waygood-Otis for micro-lifts; Dictograph Telephones, Ltd., for telephones.

Farther along Leadenhall Street, at the junction with Bishopsgate Street, the large corner premises are an extension of the London & Lancashire Insurance Company's already extensive offices. Messrs. Ashby & Horner, Ltd., are the building contractors, and Messrs. Moreland, Hayne & Co., Ltd., are providing the steelwork. The extension will be stone-faced in sympathy with the existing block.

Recently we had a note as to the firms engaged in the construction of the Capitol, a 7-storey island block in Haymarket and Jermyn Street. The following is additional information relating to it: Mr. C. H. Mabey is employed upon the stone carving; Messrs. Comyn Ching & Co., Ltd., for architectural metalwork; the British Vacuum Cleaner and Engineering Co., Ltd., for the vacuum cleaning installation.

In the rebuilding of Nos. 70–78 Fleet Street, Messrs. Allen Fairhead & Sons, Ltd., are the building contractors; Messrs. J. Skelton & Sons, for the crane and staging; the Impervious Stone & Construction Co., Ltd., for the artificial stone; and the Stigler lifts will be supplied by Marcel Porn, who is the sole concessionaire for these lifts in the United Kingdom. This is an important block of buildings adjoining the new Barclays Bank building on the south side of the thoroughfare, where the "Daily Chronicle" offices stood for so many years.

Pollen House in Cork Street, New Bond Street, W., is just now truly a hive of industry. It is being erected for showrooms and offices under the building contractorship of Bovis, Ltd. The stone façade is supplied by Ordell Masonry Company; Moreland, Haynes & Co., Ltd., are furnishing the steelwork; Rosser & Russell, Ltd., for central heating; Kleine Patent Floors; Medway's lifts; Crittall Manufacturing Co. for metal windows; and Locke & Soares are the electrical engineers engaged for the work.

The Bell at Stilton is one of the most picturesque coaching houses on the Great North Road. It is still reminiscent of the days of yore, when the stage coaches rattled along the highways, and, indeed, that old hostelry was the scene of one of Cecil Alden's famous coaching pictures. Its copper sign and elaborate wrought-iron bracket smacks of the far distant past and reminds us of the days when travellers were regaled with Stilton cheese and foaming tankards of ale. The cheese, however, came from Melton Mowbray, but it still retains the name of "Stilton."

DARTFORD.—The Urban District Council are borrowing £29,175 for the erection of more houses and the payment of subsidies. The Council have authorised the demolition of untenanted properties belonging to the Council abutting on High Street and the preparation of a lay-out plan for the disposal of the sites. Mr. J. James Hurtley, the clerk, has prepared a scheme for the development of an estate by the erection of houses for disposal to owner-occupiers.

General News.

BANSTEAD.—The Halden Estates Co., Ltd., have purchased Nork Park for the purpose of developing the same into building sites.

BEVERLEY.—The Town Council are inviting tenders for alterations at the rifle range to make it available as a school clinic and domestic science centre.

BLACKWATER.—The county authorities of Berkshire, Hampshire and Surrey are arranging a scheme for the widening of Blackwater Bridge and tenders are to be invited for the work.

BONEHURST.—The Surrey County Council have authorised the county surveyor to prepare a scheme for the widening of the bridge at Bonehurst.

BOURNEMOUTH.—A loan of £7,000 is to be sought for police station extensions.—Plans have been prepared by the borough engineer and adopted for laying out plots at Southill and the erection of 42 houses.—A site is to be acquired in the borough for a new school.—Revised plans are to be prepared for the conversion of the Lansdowne school into a central school.—The borough engineer is to prepare plans for the erection of three additional classrooms at the Malmesbury school.—Plans passed: Transformer sub-station, Charminster Road, for Electricity Supply Co.; two bungalows, Lascelles Road, for Messrs. Midgeley and Hardy, Ltd.; three houses, Court Road, for Mr. W. Moore.

CREWE.—The Health Committee of the Cheshire County Council is considering a proposal for the erection of a tuberculosis pavilion at Crewe for advanced cases.

CUNDY CROSS.—The Barnsley Main Colliery Co. have lodged plans with the local authority for the erection of 94 houses.

DORCHESTER.—Plans passed by Town Council: Furniture store, Trinity Street, for Messrs. H. Duke & Son; additions and alterations, Dorset county hospital, for Committee; additions to Bush Corner House, for Mr. W. A. Buller.—The Ministry of Health have sanctioned a loan of £13,968 for the erection of 24 houses.

DOVER.—The Corporation have prepared a scheme for a new football ground for submission as an unemployment relief scheme.—The Dover Property Company are prepared to sell two acres at £100 per acre, and the total cost will be from £23,000 to £24,000.

DURHAM.—The Durham County Council have had under consideration the question of sanatorium accommodation in the county and are satisfied that additional accommodation for the treatment of tuberculosis is urgently required.

EASTBOURNE.—The Libraries Committee are considering alternative plans for the erection of a free library at Seaside.

EGHAM.—The Hythe school is to be improved at an estimated cost of £2,200.

GLASGOW.—The Corporation have arranged for the competitive plans for the Bridgetown halls to be on public view in the Banqueting Hall. The plans have been insured by the Corporation for £2,000.—The Housing Committee have arranged that the subsidies to Mr. James Downs, builder, Jordan Hill, shall be for 48 houses.—Three clubhouses at an estimated cost of £950 each are to be erected at Mosspark, Riddrie and Drumoyne.—Fifty acres are recommended for purchase, for £55,000 at Govanhill for a housing scheme.—The lay out prepared by the Housing Director of housing land at Springfield Road has been approved.—The Medical Officer of Health has prepared another slum improvement scheme which involves a total of 3,731 houses in various districts.

GRAVESEND.—Mr. H. H. Brown, town clerk, has prepared a report emphasising the need for the provision of isolation hospital accommodation, and has been authorised to communicate with neighbouring authorities with a view to a joint arrangement.—The Ministry of Health has approved the scheme for subsidising a further hundred houses.—The Housing Committee has interviewed Mr. Clements and arranged the following terms for the construction of 24 houses on the King's Farm estate—the price to be £420 per house, the first house to be completed in four months from October 1st, and thereafter at the rate of four per month.

MARKET HARBOROUGH.—The Urban District Council have passed plans for a house in Great Bowden Road for Mr. J. Wilkins, to rank for subsidy if the Ministry of Health raises no objection to the type of hollow-cast bricks proposed to be used in construction.

MARPLE.—Cheshire Education Committee is purchasing a site at a cost of £600 for a new school.

MITCHAM.—The Urban District Council have prepared a scheme for the reconstruction of the railway bridge at Streatham Road, estimated to cost £9,000.

MORETON.—Cheshire Education Committee is seeking sanction for a loan of £14,000 for the erection of a school.

PAIGNTON.—The Urban District Council is to send representatives to the Ministry of Health to discuss the position with reference to the water supply of the district and the supply of water in bulk to the Brixham and Teignmouth urban district councils.—The water engineer has prepared plans for new water mains in the town.—The Council is seeking a loan of £7,000 for waterworks purposes.—Consideration is being given to a proposal for the provision of an additional service reservoir.—The Ministry of Health has intimated that the Council may proceed with its abattoir scheme and the matter is to be discussed with the local butchers.—Mr. A. H. Eggins has been appointed architect for the purpose of advising on a suitable site at Preston for housing and the lay-out of such land.

PRESTWICH.—The Urban District Council: Plans passed: 24 houses, Canterbury Drive, for Mr. J. Buckley, 4 Queen's Drive; 6 houses, Woodland Crescent, for Building Estates, Ltd., Manchester; 6 houses, Russell Street, for Messrs. Hibbert & Co., Ltd.; 68 houses in Orford Road, Nursery Road, and Polfield Road for County Construction Co.

ROTHERHAM.—Sixty-four more houses are to be erected on the Eastdene estate.—Land is to be purchased at a cost of £1,720 in Meadow Bank Road for re-housing in connection with the Square Yard insanitary area clearance.—Plans passed: Four houses, Broom Grove, for Mr. A. Thompson.—The borough engineer has been asked to submit particulars of alterations at the town hall as a scheme for providing work for the unemployed.

RUNCORN.—A loan of £10,000 is being sought by the U.D.C. for extensions to the isolation hospital.

SEAHAM HARBOUR.—The Urban District Council officials are to report as to the gradual alteration, if necessary, of the present Council buildings.—It was reported that there was an early possibility of the Londonderry office erecting, as an experiment, a few small houses on the Bottleworks fields.—Plans passed: Extensions to premises, Londonderry Road, for British Legion Club; alterations to premises, Church Street, for Messrs. Hunter's tea stores.

SLEAFORD.—The Urban District Council have purchased land, at auction for a housing scheme.

STRETFORD.—The Urban District Council have now had plans for a proposed central school at Gorse Hill, and are seeking sanction to a loan of £15,390, the estimated cost of the work.—A loan of £24,297 is to be sought for the erection of the third instalment of 50 houses on the Seymour site.

TUDHOE.—Durham County Education Committee have approved sketch plans submitted by the managers for the erection of a new infants' department at the Roman Catholic schools, and the remodelling of the existing school for older scholars.

WALLINGTON.—The sketch plans for the county school for girls have been amended as a result of certain suggestions by the governors and the estimated cost is £34,100. Accommodation is to be provided for 400.

WILMSLOW.—Sanction is being sought by the U.D.C. to a loan of £6,400 for the extension of the sewage disposal works.

Friction.

One of the most unpleasant features of our post-war life is the amount of friction caused by the inconveniences which make us consider the world before 1914 as a Paradise. The architect has his full share of post-war difficulties. His clients come to him with remembrances of what their friends obtained in the way of accommodation before the war. Sometimes after the architect has taken great trouble his client will abandon the idea of building on account. But if he does go on the architect's troubles are only beginning; he may have great difficulty in inducing the client to consent to the insertion of a clause dealing with rising and falling rates of wages. This obstacle surmounted the client is usually annoyed at the slow progress of building. Materials needed also are often difficult to obtain, while strikes and labour troubles are the order of the day. When the building is completed the client too frequently forgets the trouble his architect has had to meet at every stage, and begins to think that these post-war difficulties are in some manner the outcome of the architect's want of skill. We could continue, but the subject is too sad a one!

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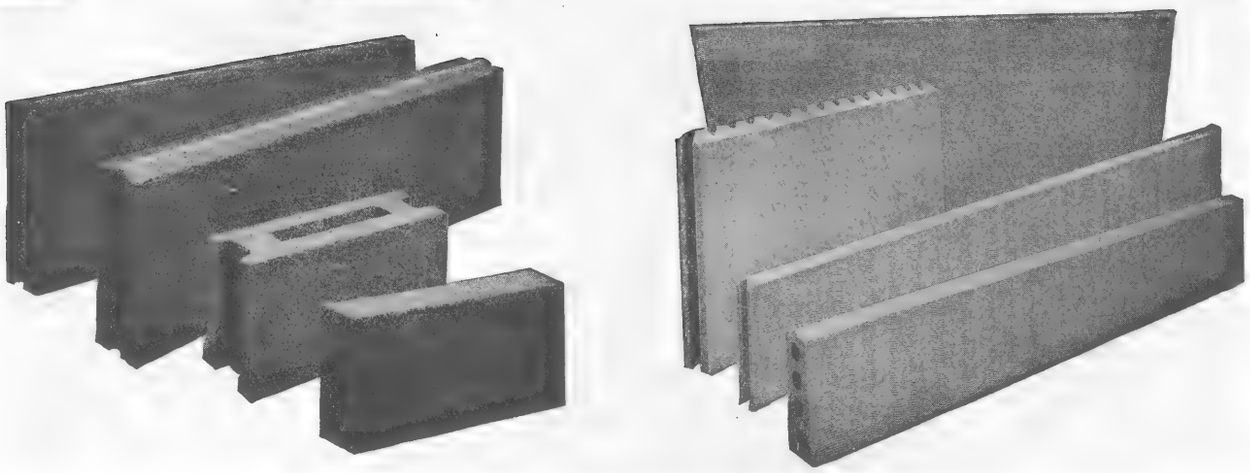

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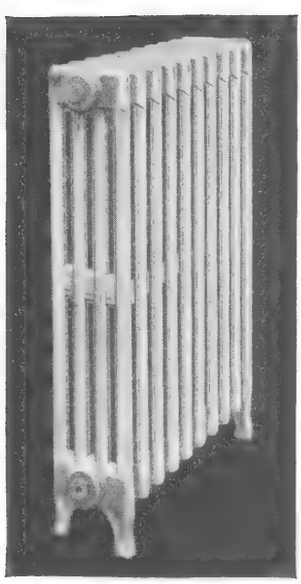

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New Catalogues

The Royal Doulton Potteries, Lambeth, S.E.1.—In 1815 a modest beginning was made in a small pottery in Vauxhall Walk, Lambeth, by two young men, John Watts and John Doulton. In 1824 the partners took larger premises in High Street, Lambeth. The garden ground which lay at the back of their kiln and dwelling-house has long ago been covered with factory buildings, though the head offices still stand on

SMALL FIGURE IN HARD PORCELAIN BISQUE.
By JOHN BROAD, Designer.

their original site. Between 1830–1840 great strides were made in ideas regarding public health relative to sanitation, which resulted in the passing of the Public Health Act of 1848. Mr. Henry Doulton, foreseeing the magnitude of the probable demand for glazed pipes for sewers, erected a special factory solely for the purpose of producing pipes and other articles of stoneware for house and town drainage. This factory was opened in 1846, near Lambeth Church. The demand soon justified the firm's enterprise; in fact, the superiority of salt-glazed stoneware pipes has never been disputed, and the industry has become of world-wide importance. Branch factories were erected at St. Helens, Lancs; Rowley, Staffs; and later on at Smethwick, near Birmingham. The old stone sink has been replaced by Messrs. Doulton's enterprise, the firm being the first to make the now almost universally used glazed stoneware sink. Mr. Watts retired from the business in 1854 and the general style of the firm became "Doulton and Co." When glancing through the very well arranged book illustrating and describing the firm's history and activities, we are charmed by the grace and simplicity of the vases, bowls and pots. In pottery the first essential is the creation of fine shapes. The decoration is almost, so to speak, of secondary importance. The shape must be well balanced and pleasing. The Harvester and Roses illustrated on pages 32 and 33 are both beautiful in shape, though many later shapes give us greater pleasure. If the shape is poor it is not worth while spending any decorative effort on the design. We imagine the Sung pots and bowls illustrated on pages 37, 38 and 39 to be full of rare beauty.

When we visit the Victoria and Albert Museum we find some wonderful specimens of Persian ware and Persian tiles. There can be little doubt but that these conventionalised forms are very suitable for pottery decoration, and Messrs. Doulton's designers have produced some very fine patterns, as illustrated on pages 41, 45. We are specially attracted to the left and right plates on page 41, and the right-hand top plate on page 45—

GROTESQUE IN BROWN STONEWARE.
By M. V. MARSHALL, Designer.

the two bowls illustrated in the middle of the page and the right-hand bottom plate, executed in the wonderful blues and greens characteristic of Persian work. We imagine that modern pottery could not produce better work.

Mr. John Broad has modelled some very clever figures for the firm, which have been executed in brown stoneware and hard porcelain bisque.

Trade Notes.

Messrs. G. A. Harvey & Co. (London), Ltd., Stand No. 171, Avenue 1, Bays 5-6, Palace of Engineering, are exhibiting a very fine selection of steel furniture, such as steel filing cabinets, steel cupboards, tables and shelving suitable for offices, libraries and workshops. These goods are entirely of British manufacture, being produced throughout at the company's works at Woolwich Road, London, S.E.7, which extend over twenty acres and comprise a plant of most modern character. Steel equipment is worthy of consideration in the furnishing of offices, etc., as the advantages of steel over wood are manifold. Steel equipment is fire-resisting, proof against the ravages of rats and mice and the white ant, and other vermin abroad. It possesses other attributes: it is hygienic, more durable, and less costly than wood. At the Exhibition stand are shown types of radiator guards and covers in "Harvey" perforated metal suitable for installation in hotels, offices, mansions, hospitals, ships, etc. Ventilating panels, pipe covers, grilles and other specimens of decorative metal work are shown in "Harvey" perforated metal.

EPSOM.—In view of building developments, the Urban District Council have prepared a scheme, estimated to involve an expenditure of between £5,000 and £6,000, for widening the London-Epsom-Farnham main road on the north side between the Clock House and the White Horse pond.—Plans have been approved by the Board of Education for a new infants' school at a cost of about £4,610 and the Surrey County Council is shortly to invite tenders for its erection.

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Professional Advertising.

We give an article on the subject of professional advertising, a matter which appears to be of perennial interest to many, but one which, in reality, is solved by every man invariably in a manner which is determined by his mental bias and inclination. It is true that the R.I.B.A., in common with the governing bodies of other professions, has formulated rules or regulations to control these matters, but it may be questioned whether any rules or regulations can be of use, while they are most difficult to apply.

Advertisement is neither good nor evil in itself. To advertise either an article or a person is to attempt to make that article or person more widely known. This may be effected in one case by simply stating facts or, alternatively, by making assertions which are not justified by facts. In the first case the result is clearly legitimate, while the second is questionable as it is an evident attempt to secure advantage by means of a false statement.

In most cases the statement of that which can be demonstrated to be false in the end does more harm than good. If a dye advertised as being permanent is not so, the makers of the dye have probably secured a temporary sale at the price of a general condemnation, which will prevent future sales, whereas had they not called attention to a quality which their dye did not possess its other advantages might be freely recognised.

It is nearly always unwise to make promises of more than can be achieved with certainty, for " hope deferred maketh the heart sick."

It is usual for the architect in a colonial town to insert in the local newspaper what is practically a replica of a card giving his name, address and qualifications, with the possible addition of some short statement of the work he undertakes. These notices are much like those of contractors or sub-contractors, and seem to us to be quite as legitimate in the one case as the other. The question of whether they do or do not increase the business or enlarge the opportunities of those who advertise seems to us the only one which need be considered.

But we may consider another type of advertisement. That of the displayed poster. It may or may not lead to the sale of more mustard if a manufacturer advertises his brand in letters five feet high on hoardings, but no contractor or sub-contractor would think it worth while to do so, and the architect who proposed such a means of calling attention to himself would be looked upon as a madman.

Evidently there are limits to the reasonable use of advertisement for differing purposes and differing callings, and what is reasonable and useful in one case is not in another.

Our contention is that it is natural and legitimate for any man to endeavour to attract attention to himself by any reasonable means which are consistent with good taste, and that every man does and will advertise himself in some way if he feels inclined to do so.

Many architects have given lectures on architectural subjects to public audiences. They are no doubt keenly interested in their subject and enjoy doing so, but it may at the same time be doubted whether they would devote time and trouble to such occupations did they not feel that it might be a means to make themselves more widely known to the public and so increase their chance of obtaining commissions. In such a case the lecture may be regarded as a subtle form of professional advertisement.

The same may be said of writing a book on some aspect of architectural work of a nature that interests the general public, and there is little question that many books have been written largely with this object in view.

Those who take part in the public life of a locality in many cases do it partly, if not wholly, with the object of making themselves known to those who may be of use to them professionally, but few of us would condemn a man for doing so.

Politics have always served as a means to secure publicity for a barrister at the outset of his career, and frequently as a means to secure high appointments in after years. Doctors, in spite of a rigid etiquette, find many means for making themselves known, and good manners and address have frequently secured for men positions which they could never have acquired by ability alone.

We have always wondered why it was that the R.I.B.A. have raised objections to an architect's name being displayed on the hoarding of a building which is being erected, because a building in course of construction secures more attention than the same building does when completed, and as the quality and character of the building are the outcome of the architect's skill, it seems slightly illogical that he should be precluded from the full advantages which may accrue from it. Why should we think it natural and proper that the constructional engineer employed should display his name and not the architect ? The engineer has possibly been employed because he gave the lowest tender, not because his work is better than that of his competitors, whereas the architect is presumably employed because his clients consider his ability to be greater than that of others. Intrinsically he has been chosen for his merit, while the constructional engineer's appointment may frequently have been determined by a mere matter of price.

But if it be wrong for an architect to have his name attached to a building, why is he permitted to have his name cut on the actual structure of the executed work ?

Is it because it has to be done so unobtrusively that few will ever read it, or is it that we consider it our duty to make an indelible record for posterity ?

If such be the contention it is the public authority of every district which should make such records obligatory rather than either the architect or his client. Possibly the latter would in many cases, were he consulted, object to the expenditure of even the small sum of money that such lettering involves, as it does him no good.

We believe the question of professional advertising has hardly been looked upon from a broad enough angle, and if the question is considered more fully we should find little reason to differentiate between what is legitimate for the manufacturer, business man or the architect.

We may be quite certain that men of every calling will advertise in some way or another, and that whatever restrictions are laid down men without a proper sense of dignity will show their failings in their actions. We may by regulation force men to adopt one means instead of another, but we shall not eliminate the very natural tendency they have to endeavour to secure a greater amount of recognition.

The architect and the tradesmen both work for money, though it may revolt some to see the statement made in black and white. The chief difference between a trade and a profession is that the subject matter of a profession is more interesting to those who are not engaged in it than trade is, and that the preparation for a profession involves an expensive education.

But the professional man sells his advice and skill, whereas the business man and tradesman sell actual commodities. The opportunity of the one depends on the knowledge of the public of the value of the commodity, in the one case skill and the other actual goods, to the purchaser or client. Advertisement in some form or nature is usually necessary to both, and the nature of that advertisement depends on circumstances. If we have by virtue of chance the monopoly of anything necessary to the public, advertisement is unnecessary, but few are in this favoured position. Most of us are out to sell what may be obtained elsewhere, and as long as this is true advertisement will be valuable.

But advertisements are infinitely varied. The architect who would see no one without an appointment, and would undertake no commission of less than £100,000, would be advertising himself by letting the public know these conditions. Whether it was an ineffective or a paying advertisement would depend on the man. The doctor whose house is distinguished by a red lamp, and his colleague in a fashionable district of London with his name on a small brass plate which can hardly be deciphered, are both advertising themselves, the one by making his consulting room prominent to the passer-by, the other by tacitly announcing that he is so well known that it is unnecessary to render any assistance to those who seek him.

Our conclusion is that professional men will always advertise and that endeavours to control their activities are bound to be futile.

Our Illustrations.

HOSPITAL AND MEDICAL SCHOOL AT CAIRO. Nicholas & Dixon Spain, Architects.

NEW VICARAGE AT SUNNINGDALE, BERKS. Nicholls & Hughes, Architects.

Notes and Comments.

Peace or an Interlude.

It is satisfactory at first sight that the strike or lock-out should be ended, but if we are to believe the statements quoted in a contemporary the peace may not be one of long duration, as the operatives are stated to be ready to come out again on the question of the 44-hours week and other minor issues. If this information is correct, as we hope is not the case, it is difficult to see a prospect of material progress before the winter months are once more upon us. It might be cheaper to work the building trades with imported foreign labour and to pension the men who inconvenience the community so often out of the money saved by the employment of those who are not perennially unwilling to work for wages. This is the only practical suggestion which occurs to us as a means of getting over difficulties which do not seem to apply to similar situations in France, Germany or Belgium.

The American Institute of Architects.

In forming a plan for developing the membership of the American Institute of Architects, according to the New York "Times," it has been estimated that by 1926 the number of architects in the United States will be 10,000.

The Institute, it was said, must enroll 4,000, or 40 per cent. of this number, in order to make it truly representative of the profession. The Institute now has 2,774 active members. Last year a net gain of 230 was reported. This year the net gain is only 153. There has been a gain of 1,332 in three years.

The New York Chapter, founded in 1867, has nearly 400 members. The Brooklyn Chapter, founded in 1894, has about 100, and the New Jersey Chapter, founded in 1900, has more than 130 members. Broad plans of expansion, both in the public interest and in the direction of more effective professional organisation, will be carried out during the administration of Mr. Waid, culminating in the next national convention of the Institute, to be held in New York in 1925 in connection with a great international exhibition at the Grand Central Palace.

We are surprised that the total number of architects in the United States is not in excess of the figures here stated.

Soothing.

Many tenants of the Liverpool Corporation Elm House and Edge Lane estates complain that dampness has ruined their furniture. They allege that they have written to the Housing Committee regarding the state of the property without effect. No steps have been taken to ascertain the cause of the defect or to find a remedy.

A councillor at a recent meeting stated that when *bona fide* cases have been brought before the Committee they have always received careful consideration, but little progress has been made as the officials have been away on their vacations. It will doubtless gratify those whose furniture is in process of dissolution to know that the officials will come back strong and invigorated to meet their difficult problems, and all we can hope is that the poor fellows have not been worried while away at Monte Carlo or other health resorts or put off their stroke at golf. Presumably the tenants will receive consideration later on.

Plenty of Acts, but——

We are more and more convinced of the uselessness of much of our current legislation. Acts passed with a great flourish of trumpets are found to be in effect almost dead letters, though their administration necessitates a great increase of officialism which has to be paid for. Under the Chamberlain Act the subsidy paid in respect to the rents of houses built under the Act could at the option of the local council be capitalised. When the owner who wishes assistance under this clause sends in his application he has first to satisfy the authorities that he is a fit and proper person to receive assistance and subsequently to send in plans and specification in order that the authorities'

advisers may determine whether the cost of site and buildings will or will not exceed £600. After he has passed through these tests he may or may not satisfy the exacting requirements, but he will probably come to the conclusion that it is as well in future to do without State aid. We believe an attempt has been made to pin the technical advisers of the local authorities down to opinions which would make them valuers of the property so built and responsible for its selling price after a lapse of years had occurred and new conditions arisen. It is not surprising that surveyors should wish to avoid quite so much responsibility; they have quite enough on their hands as it is.

Apprentices in the Building Trade.

The propaganda secretary of the I.L.P., speaking at Guildford on Saturday, stated that there were vacancies for 35,000 apprentices in the building trade, the reason for which was that wise parents would not apprentice their boys to a trade which did not offer secure employment and a good working income.

We would ask whether it is likely that, with the reluctance to increase output and to make building attractive to the business man as a commercial speculation, it is possible to obtain for members of the building trades "secure employment and a good working income." Secure employment can only be the outcome of conditions which are reasonable and satisfying to both contracting parties, and so far the building operatives have been absolutely inflexible in their refusal to recognise the employers' point of view. We have absolutely no sympathy with those who complain of inadequate wages and refuse to augment them by working occasional overtime; we can only stigmatise as stupidly obstinate the refusal of the men to recognise the reason of working a little longer in summer than in winter. What the building operatives really want, or rather what their leaders want, is to receive a bonus at the cost of the community, however inefficient they may prove themselves, but sooner or later they will exhaust the patience of those who have hitherto sympathised with them.

Antiquities.

The joint expedition promoted by the British Museum and the University Museum, Philadelphia, has resulted in the discovery of the foundation stone of a temple bearing the name of a king unknown to archæologists but whose father's name, given on the tablet, is that of the founder of the first dynasty of Ur. His actual date must be between 4,000 and 3,300 B.C., which carries back the history of Mesopotamia many centuries.

But recently clay tablets have been discovered near Mexico City which date from approximately 5,000 B.C., and would therefore seem to be the earliest remains known to exist.

The most interesting feature of many of the discoveries recently made is that they substantiate statements hitherto believed to be chiefly mythical, as is evidenced by the records on the Black Stone in Rome, which showed that a dynasty of kings believed to be mythical belonged to the realm of history.

Two Competitions.

Two competitions for exceptionally large building schemes are now advertised, one for Freemasons' Hall and offices, and the other for the Manchester Art Gallery. The first will cost about £500,000, and is to be divided into two stages. Sketch designs are asked for, which are to be sent in on or before May 1, 1925. From these not less than six designs will be selected, the authors of which will compete in the final competition. The new buildings will occupy a site to the west of the present Freemasons' Hall in Great Queen Street, and will be bounded on three sides by streets. The assessors appointed are Sir Edwin Lutyens, Mr. Walter Cave and Mr. Burnet Brown. The Manchester Art Gallery is to cost £300,000, the site being the one originally fixed for the former competition in 1914, with some modifications. The assessors appointed are Mr. Paul Waterhouse, Mr. Percy Worthington and Professor Reilly.

Foreign Bricks.

An importer made the following statement to a representative of the "Morning Post" on the subject of the importation of foreign bricks:—

I gave an order yesterday for 5,000,000 bricks for delivery in the Thames. The demand for bricks is great in this country, as everyone knows, and the syndicate of English brickmakers do not permit of the demand being met. It is true they are now afraid of the present Government subsidising new syndicate firms to open up fields, but it is just now quite profitable to keep production down.

We had capital, and have invested it in this trade. We have the ships and the organisation. A great deal of money had to be sunk. We paid the French and Belgians to instal new machinery, and we have to pay down cash with orders, because they cannot carry on without backing, but we gain by the exchange, and we are delivering the goods where they are wanted. Free Trade is supposed to prevent rings and trusts; it has not in the case of bricks. Yet we do not undercut much.

An amusing feature of the situation is the way in which small men have tried to enter the business. We had a case of a hairdresser, who had a brother-in-law a bricklayer, and he wished to arrange for a supply of bricks from abroad, but he collapsed when he found out what was involved in ship chartering alone.

While it may be good news to many that such additional supplies are available, we hope that the brickmaking industry will be able to extend their businesses in order to supply all our demands, as we should be able to cope with them without the help of exports.

"The Architect" Fifty Years Ago.

AUGUST 29, 1874.

WESTMINSTER ABBEY.

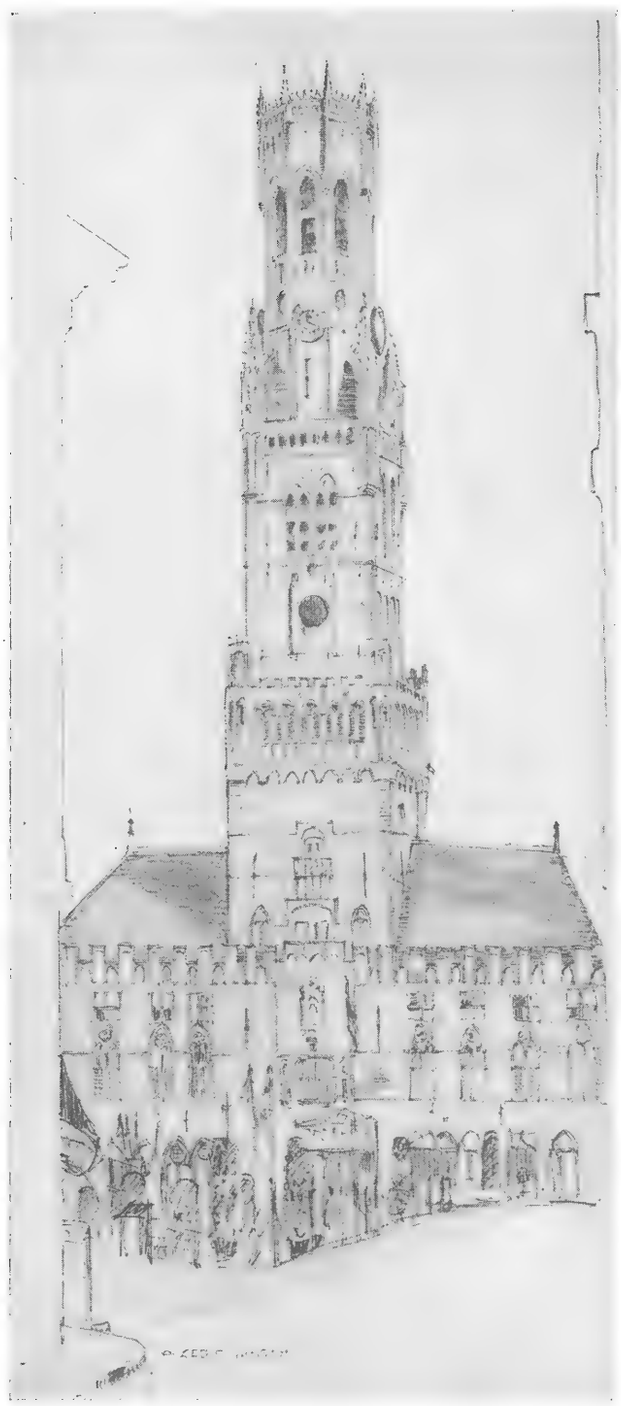
The works which have been for some time in progress with the object of securing the safety of Westminster Abbey in case of fire are now nearly complete. A tank, capable of containing 6,000 gallons of water (which will always be kept full) resting on beams 18 inches square, has been erected in the south-west tower, at an altitude of 160 feet from the ground To keep up a constant supply of water to this tank, a pipe from the main (which the Chelsea Water Works Company have enlarged at their own cost, to afford greater facilities and pressure), has been carried up the north-west side of the Abbey, to the triforium level, passing through the north-west tower and thence through the roof to the south-west tower. Pipes connected to the tank have been laid all along the roofs, with hydrants and hose always attached at different positions, so that at the first alarm of fire one man unaided will be able to turn on the water to any point of danger. A second pipe runs from the triforium along the roof to Henry VII's Chapel, at the entrance to which a stand pipe has been fixed. Both of these pipes have been fitted with double hose and hydrants. It is calculated that the tank alone, when fully charged, will find a supply sufficiently great to keep up a constant deluge for fully half an hour; but in the event of the fire engines not arriving in that space of time, a powerful hand pump of 12-men power has been attached to the main, to keep up a continuous supply to the tank and thence to the hydrants. The works have been carried out from designs furnished by Mr. Wright, clerk of works to the Dean and Chapter.

The British Medical Association is erecting a large block of premises just off Tavistock Square, London, and the exchange of headquarters will be, architecturally, distinctly advantageous. The building shows a central block with two advanced wings. Stone is liberally used on the façades, which consist mainly of red brick. An unusual variation in the treatment is the covering of the piend walls of the wings with red tile weathering from ground level to parapet. Messrs. Ford and Walton, Ltd., are the general contractors, and Messrs. Redpath, Brown and Co., Ltd., have supplied the steelwork.

New premises for the "Daily Sketch" are being erected in Gray's Inn Road, Holland and Hannen and Cubitts being the general contractors. Sub-contracting firms are: Edward Wood & Co., Ltd., constructional engineers; the Lancashire Brunswick Rock Asphalt Co. for reinforced concrete and asphalte; Westminster Wharfage Co., Ltd., for the aggregate for the reinforced concrete; B. Goodman for the demolition and excavations; J. C. Edwards (Ruabon) and the Leeds Fireclay Co., Ltd., for glazed bricks and tiles; Ashwell and Nesbit for heating and ventilation; H. Pontifex and Sons, Ltd., for sanitary fittings; Luxfer (the British Luxfer Prism Syndicate, Ltd.) for metal windows; Clark & Finn for plastering; Alfred Goslett & Co., Ltd., for glass and glazing; Medway's Safety Lift Co., Ltd., for electric lifts; George Mills & Co., Ltd., for "Titan Patent automatic sprinklers" as a fire protection.

A Wanderer in Bruges.

E. Leslie Gunston, A.R.I.B.A.



THE BELFRY, BRUGES.

Bruges! the city of bells and two-inch bricks, the Mecca of all good minded architects.

What memories the name of Bruges calls to the mind! —wonderful little streets, endless rows of gables and enough gable steps to tire out all the crows in Christendom. The bricks are a beautiful colour, mellowed by Time's sure artistry, and what the old Flemish builders did not know about brickwork was surely not worth knowing; and how cleverly they understood the decorative value of the iron tie, for assuredly in such excellent brickwork no ties were theoretically necessary.

You cannot remain many minutes in scarcely any part of Bruges without being reminded of the Belfry either by the ear or by the eye.

As you live in Bruges, and after the first magnificent shock of confronting this monument of beauty, the wonder of it increases, until, day by day its loveliness grows upon you, at first perhaps unconsciously, then after a little while you will find that you go out of your way through the Grand Place on the way home for the express purpose of having yet another look at the Belfry. The subtle play of light and shade from passing clouds and the luminous air make of this tower a creation as fantastic as it is full of beauty, and one is very glad that the gilded spire, repeatedly struck down by lightning, was never again rebuilt.

Like a beautiful woman it needs no further adornment.

One is bewildered by the number of churches, but memories remain of many a charming church. Notre-Dame with the cliff-like walls of the brick tower shelters a beautiful picture, a Mater Dolorosa, and that wonderful Madonna and Child of Michaelangelo, in white marble, which shines like ivory after the fashion of such old sculptures. The brick filling in the vault offers a striking contrast to our own Gothic vaulting, emphasising more the lines of the ribs, but a pilgrimage must be made to a certain superb church in Ghent to see this use of brickwork to perfection.

The smaller churches in Bruges offer the architect many delightful examples of architectural detail, and interesting and instructive it is to go from one to the other, out of the noisy cobbled streets, into the quiet dim churches, aglow with the mystic light from stained glass and many a candle, while the pungent aroma of burnt incense mingles with the heavy scent of the Madonna lilies beneath some altar.

What quiet corners here and there to allure the ardent

WOOD FRONT HOUSE IN RUE DE L'EQUERRE, BRUGES.

FROM INSIDE BEGUINAGE, BRUGES.

CHURCH OF JERUSALEM, BRUGES.

sketcher!—wonderful compositions to those who seek them, fine façades of brick, delightful conglomeration of pantile roofs, and chimney stacks of an infinite variety, shapes and sizes, some short and massive, some tall and tapering, while others are crowned with a weird erection of ridge tiles.

Some houses are washed a cream colour, and when the sun shines, the trees, the red roofs and the houses all reflected in the mirror-like water of the canal, make a composition lovely enough to turn the head of any seeker after beauty, in all its multiplicity of forms.

There is nothing more fascinating than taking a walk about nine o'clock on a summer evening (when the moon is just rising huge and golden) around some quarter of Bruges, following no pre-arranged route, but going down this street, then down that one, over that attractive little bridge and along by a Quai under the sweet lime trees, and then round this corner, and up this turning, and down the next one that takes your fancy.

One sees much of old Bruges in this way, and the element of adventure and exploration dear to the architect is not lacking.

The priceless pictures housed in the churches and museums of Bruges give to all lovers of the beautiful a wealth of imaginative art. The great names of Memling and Van Eyck more especially are associated for ever with Bruges. The masterpieces of Memling in the Hôpital St. Jean defy description. They must be seen again and again to appreciate their full beauty.

And how can all the wonderful things in Bruges even be mentioned here? How can one give even an impression of the quietude of the Béguinage, the exquisite marvels of lace in the Gruuthuse among the many fascinating treasures there, the brasswork, and the glories of ecclesiastical embroideries, the ever-changing scenery and reflections along the canals, and the stately swans, the unerring precision of the helmsman steering his slow-gliding tremendous barge through the swing-bridges, the noble Flemish horses and the kindness of the people?

And when the long day of exploring new parts and the day of sketching is over and you sit at a little café in the Grand Place, listening with wonder to the carillon far up in the Belfry, this tower becomes even more wonderful and lovely than in the daytime. The sunset glow rests on the stone of the octagon and turns it into a fairy creation, and then when you start homewards, when all is dark, you turn yet again to see this towering mass, a deep indigo, silhouetted against the dark grey sky sprinkled with stars, and you realise what an unearthly splendour surrounds this momument to the genius of men and to the liberty they strove for in the ages long past.

How to Etch.

J. R. Hutchinson.

BRISTOL HARBOUR. J. R. Hutchinson.

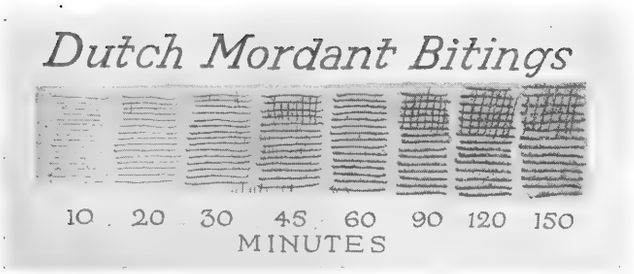
The following article on etching is written in the hope that it will interest the architect—that draughtsman who has a leaning to the artistic side of sketching architecture, and there are many such, and, if he is used to pen and ink work, I think he will be sure to find in etching a fascination that will never leave him when he has once taken up the work, as it gives one the very finest and delicate as well as the strongest and most vigorous results. I began myself in my spare time from office hours when I was in Newcastle-on-Tyne, where the old Tyneside buildings and shipping gave one all the "subjects" one required.

I will state what are the requisites for the etcher, and will proceed *de novo*. Well—first there is the question of the copper-plate, and where to procure the best. I purchase mine from E. J. Rainger, 89, Maida Vale, London, W., and they cost approximately one halfpenny per square inch. It is necessary to first clean the plate with turpentine and finish by rubbing the same all over with whitening. The process is the laying of the etching ground. Small cakes of the material can be obtained from Roberson, artist colourman, of Long Acre, London, W.C. The etching ground is best layed by using a dabber for spreading the ground evenly all over the plate; this dabber you can also get from Messrs. Roberson, their price being 1s. 6d. each. Now to lay the ground: you heat your copper plate over a gas burner, or spirit lamp, and with the etching ground you let it melt on the plate, spreading it over the plate, and then with your dabber you work the ground all over the plate as evenly and finely as you can and as thin as possible. The next essential procedure is to smoke the surface black, and to do this properly it is best to use wax tapers held in a bunch together and with the plate held upside down in a handvice you let the flame travel lightly all over the plate, taking care not to burn the surface, which should, when smoked, be a polished surface of black, and if any part looks dull that shows that it has been burnt and the ground must be laid again, as the burnt part would chip and break up in the drawing. Another way of laying a ground is to use a liquid etching ground, which you can get from Rhind, 69, Gloucester Road, Regent's Park, London, N.W. You pour the liquid all over the plate and let it drain off at the corner, gently tilting the plate at the same time. This ground works very well and gives very good results and saves the trouble of using the dabber; the plate will dry in a few minutes and can be smoked as before described.

Having now got your plate ready for the etching, it is necessary to prepare a tracing of the subject you intend to etch. This you then lay the reversed side uppermost on the plate, and underneath the tracing and next to the plate you put a piece of black transfer paper, and with an H.B. pencil you go over the lines of the tracing and in this way the outlines will be transferred on to the etching ground; you can take up a corner and see how it looks whilst you are doing it. Having got your outline drawing on to the copper plate you are now ready to begin the actual drawing on the copper, and for this purpose you want an etching needle, which you can get from Rhind or Roberson, or you can make one yourself with an ordinary sewing needle stuck into a wooden handle, or one of the gramophone needles does very well, but I think the bought etching needle is best; they cost 1s. 6d. each.

You are now seated at your table with your drawing before you, and with a small mirror in front of you to reverse your drawing, if you wish it to come out the same as your sketch. Hold the needle in as perpendicular position as possible, and use a certain amount of pressure with the point, as it must pierce through the ground, or the biting process which follows will not act upon it, as all etchers at times have experienced. It is advisable to use the same amount of pressure throughout all the work; it being remembered that it is the acid biting that gives the depth to the line, and not the etching needle, which only removes the ground to enable the acid at a later stage of the work to attack the copper.

In the drawing keep the foreground lines more open than the distance, where the lines can be close together; this will at once give the idea of distance. The bitten lines will generally be found to look more open than you expect; you should use some soft blotting paper or tissue paper to protect the ground when you are working on it. Work as simply as possible, and avoid cross-hatching. Having drawn your subject on the copper plate, you are now ready to start the biting in process. There are two ways of biting in the plate and each have their advocates; it will depend upon the individual taste of the etcher as to which he will prefer. The two mordants are the Dutch



Mordant and the Nitric Acid Mordant. The Dutch Mordant is composed of hydrochloric acid 4 oz., chlorate of potash 1 oz., water 20 oz. You must dissolve the chlorate of potash in warm water first and add the hydrochloric acid to it when it has all dissolved. This Mordant works slowly, but it is a very safe and reliable one, and I always use it myself on that account, but before using it you must dissolve a small piece of copper in it, when it will turn a slightly greenish tone; it will then be ready to use. The accompanying illustration gives some bitings and the different times they took in the bath, and it should be slightly warmed when used, to about 80° F.

The other mordant of nitric acid is made up of equal portions of acid and water. This mordant works very much quicker, and you can tell how it is biting by the bubbles that form, and which you must brush aside with a feather as they form; it will give you vigorous lines in about half an hour or so. The drawback to this mordant is that it is more uncertain than the Dutch mordant, and in cold weather will bite much slower, and also it will attack the closely drawn lines much quicker than the more isolated ones. Personally, I prefer, and always use, the Dutch mordant. Before you begin the biting you must have a test-plate done, giving several bitings of from two hours to ten minutes, as I have done in my illustration. This will enable you to judge how long to give in order to get your various degrees of depth in your lines. Before you put your plate in the acid bath, for which you use a porcelain tray, you must paint over the back of the plate with Brunswick black to protect it from the acid, also the margins of your plate. You are now ready to put your plate in, say, the Dutch mordant bath, and you can give it ten minutes biting. Now take it out and immerse it in a bath of cold water, then take it out and dry the surface with some soft blotting paper, and you are now ready to begin the stopping out process, which consists in painting out with some stopping out varnish, which you must get from Rhind or Roberson, or you can use Brunswick black thinned with some turpentine, but I advise you to use the regular stopping out varnish, as it dries quicker. You must now, with a fine sable brush, paint over all the very finest part of your subject, such as the extreme distance, or any high lights, where the lines are delicate. The varnish dries quickly, so you can put your plate in the bath and give it another ten minutes, then take it out and stop out with your brush the lines that are next wanted, and so you repeat the process of biting in and stopping out till you have got only your strongest and darkest lines left. As a general rule about half a dozen bitings will give you all the different strengths of lines you require, say, of 10, 20, 30, 60, 90, 140 minutes; but it will all depend on the class of subject whether it is delicate or vigorous. You can now remove the ground from your plate, and to do this you warm it, and pour some turpentine, or paraffin, over it, and with some cotton wool clean the surface, and if it is discoloured in places a little emery powder and oil on some cotton wool will polish up the surface again. You can now see what the plate looks like, and if it does not come up to your expectations you need not be disappointed, as it very seldom does at first. It will be sure to want strengthening in parts, and reducing in other parts, and I propose in my next article to put you in the way of remedying all these little defects, and enabling you to bring your plate into a right condition, and so enable you to get a proof from it that will give you some reward and satisfaction for your labours upon it.

The accompanying illustration is a bit of Bristol Harbour, and is interesting to me as it was my first published plate, and was published by Frost & Reed, of Bristol, though since then many more of my Bristol plates have been published as the harbour and old buildings provide very interesting subjects.

Fifty Years Hence.

FROM "THE ARCHITECT" OF AUGUST 29, 1974.

The architectural competition of the past was a cumbrous and uncertain process, involving much discussion and productive of much dispute. To-day we simply invite those who wish to act as architects for a public building to visit the State Registry of Special Ability. There by an electrical process a film is obtained of their brain power as directed into different channels of thought. Having obtained enlargements of the designing power evidenced in the development of the brain, the various candidates are arranged in a series and again tested for general mental activity and vigour, on which the successful use of technical designing ability depends. The result, expressed in terms such as A15, B5, can be readily contrasted with A 10, B 10. It has been scientifically demonstrated that a very great designer who is somewhat casual in his work is not usually as good an architect as the man of somewhat smaller powers and more consistency and perseverance. The chief and only uncertainty of the architectural competition of to-day is the different values given by public bodies to A in relation to B, otherwise our present system is infallible in its results.

Mr. Lutyenshaw, Pearson Street, was to-day placed first in the competition for the rebuilding of Regent Street, a specimen of the mistaken ideals of the early part of this century. The new scheme will consist of seven storeys of uniform heights, each storey being lighted by luminous wall and ceiling coverings manufactured by the Bledisonvue Company, entered from broad pillared verandah ways at each floor level. Communication between the various levels will be by the patent revolving circular stairways manufactured by the Chano-Ot. Company. The new system of horizontal development will be adopted throughout, time and trouble being obviated by the elimination of vertical subdivision of shops, while the commercial opportunities of display are enhanced. The whole of the centre of the street will be devoted to the use of pedestrians and shaded by avenues of trees, the automobile tracks being taken underneath in broad, well-lighted tunnels communicating with the tube stations at Oxford Circus and Piccadilly Square. The whole of the rebuilding will be completed in 18 months' time. It will be remembered that Mr. Lutyenshaw, Pearson Street, won the recent competition for a Home for State Socialists, socialism being now classed as the most incurable form of mental delusion.

It is said that the Royal Institute of British Architects are proposing a greater Unification Scheme, under which the Institute will absorb the Federation of Building Operatives of the United Kingdom, and the new and enlarged body, which will number some 700,000, will then procure the consent to a new Charter from the Privy Council which will penalise those members of the public who have not at the age of 40 given at least two lucrative commissions to members of the Institute. The new class of members to be created will be allowed to use the letters N.A.R.I.B.A. —necessary adjuncts of the Royal Institute of British Architects.

Correspondence.

[The Editor will not be responsible for the opinions expressed by Correspondents.]

Architectural Education.

To the Editor of THE ARCHITECT.

DEAR SIR,—Much has been written and spoken of recent days on this subject. The R.I.B.A. have held a conference and many useful opinions have been voiced, though curiously enough the individual most vitally concerned has not been heard on the matter. I therefore as a student beg to send you this letter in the hope that you will not think it too presumptuous for publication. I would like to say at this point that I have no wish to appear conceited, or disrespectful to my masters or to any member of the profession, many of whom have most disinterestedly spent much time and trouble in trying to organise the best possible system of training. When I joined the Architectural Association I was convinced that I should secure in the A.A. schools the very best possible training, and I am still of the conviction that their methods of teaching are the best we at the present time possess. To judge an educational system by one year's work shown at an exhibition is hardly fair. But even then the exhibition held in connection with the recent conference showed that the A.A. and all the other architectural schools were more or less working on the same lines. Let it be supposed that the general verdict of those who visited the exhibition was that the show was poor and uninteresting, which it certainly was not, but I am suggesting that it is taken for granted that it was poor work. Should this fact condemn the system? Why, certainly not. There might be general falling off of ability amongst the students. Some students might not have had their best work shown, many might have been engaged in measuring, sketching and studying, and thus not have had time to make exhibition drawings. If some did not approve of the practice subjects set, I would remind these critics that it must be increasingly difficult to find subjects which have not recently been set before. It is not always possible to possess in the different schools a number of brilliant designers who would naturally add considerable interest to an exhibition. I know that I am improving every day with each subject that I attempt. My imagination works more correctly and speedier than formerly. I am hoping that by the time I leave I shall be able to form an opinion about most of the architectural problems that are likely to turn up. If I were to spend all my time sketching and measuring there would be none left wherein to practise designing under the direction of the able staff.

There seem to be quite a number of men who imagine that the system of training that was in vogue in their early days is good enough for to-day. Thirty years ago the conditions of living were totally different. Judgment is formed by results, writes the critic of the present system, and though I be only a student I would venture to think that the architectural evidence we have all day long before us in every street you venture is sufficient evidence against the educational system of the 20 years or less ago. If this system was productive of Fleet Street, Ludgate Circus, Queen Victoria Street, Oxford Street, Shaftesbury Avenue, Tottenham Court Road, New Oxford Street, High Holborn, St. Bride Street, etc., etc., then let the past system die and be put away from our minds for ever and ever. Let those who admire it look at St. Paul's Churchyard, Cheapside, and nearly every street in our great city. The past system of architectural education has produced a modern city of London which does not contain a single street which anybody can truthfully call architecturally grand and impressive. We students, one and all, believe in the present system as the best, it will go on improving and bettering itself, it lends itself to the production of men who are likely to think deeply for themselves. The present generations in comfortable practices have not produced a single characteristic architectural feature that in the future will mark the architectural character of our time. They are steeped in tradition because their education permitted them no freedom of thought.

Yours faithfully,

"STUDENT."

Menace to the Small Architect.

To the Editor of THE ARCHITECT.

SIR,—The three last numbers of your valued journal have been forwarded to me whilst on holiday and I have read with much interest the above contribution of Mr. Craik's. Mr. Craik, however, makes one wish he had dealt more extensively with the above subject and after reading his excellent attempt to portray the woes of the smaller architect one feels sorely tempted to supplement his remarks, and I have succumbed.

In a town in Essex where building is ever on the increase the value of the architect as such to the clientèle is very negligible, and those who practise in that town suffer the evils which Mr. Craik enumerates more than perhaps any other town in the kingdom. Builders are more or less independent of the architect, and having paid the nominal sum of two or three guineas for a set of drawings the services of the latter are mostly dispensed with. Those employers who attempt to employ an architect are frankly told by the builders that there are two prices, one for the building with supervision and another price without; needless to say the second is in the most cases more acceptable. Should he wish to convince the client and retain his legitimate position the architect is forced to take out quantities, which in the case of small domestic work involves more time and labour seldom recognized and seldom paid for, and these make the task hardly worth his while. The Borough Surveyor's office deals with innumerable plans submitted per day and is hopelessly understaffed in the way of building inspectors, and even if the officials in question had the time to deal with drawings from the point of architectural merit they certainly have no power to refuse to pass any drawings which may prove a complete travesty of the term draughtsmanship. So long as they show compliance to Bye-laws that is sufficient.

Mr. Craik should not lose heart if the signs of the times are any guide, and the following remedies are suggestions in themselves supplementing Registration, by adopting which the extinction of the small architect is rendered remote. Registration without these supplementary or incorporated remedies would be an empty blessing.

One suggestion as follows, is:—

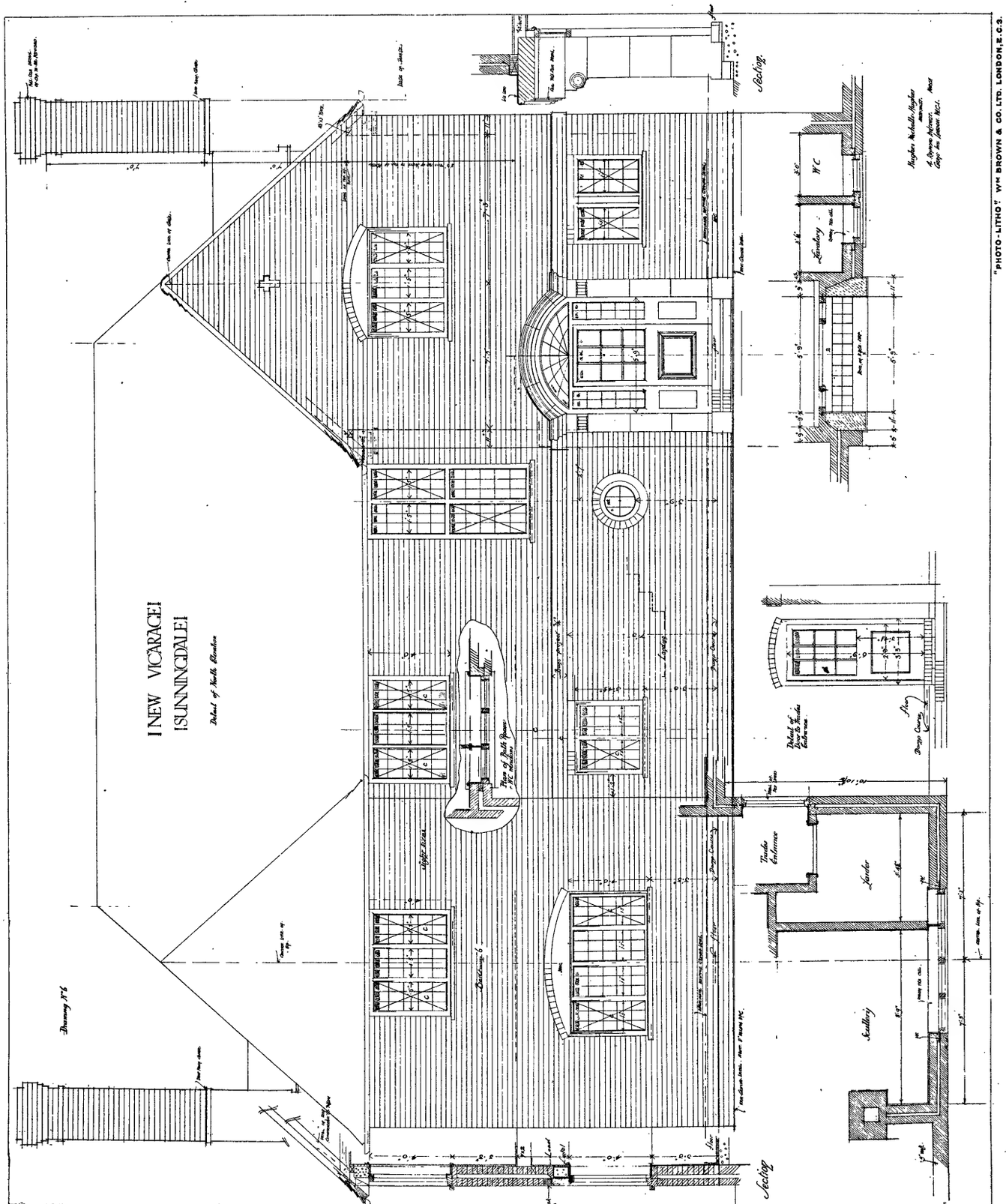
(1) Each town and community to possess a thorough qualified architect whose duty it will be to check, pass or turn down all drawings and plans that are either good or bad as the case may be, both from an architectural and constructional point of view. This official to be supplementary to the Surveyor.

(2) Every drawing or plan submitted to the local authority to bear the name of a registered and qualified architect without which legal and statutory evidence the plans fail to go through. Appeals in both cases to be made to a Ministry of Fine Arts or failing this the Ministry of Health.

(3) That it shall be deemed a professional offence for any architect to submit sets of plans to publishing firms for piracy or broadcasting purposes, and all plans and elevations shall by law when published bear the name and address of the author. Further, the Copyright Act should be strengthened as far as architects are concerned to enable the Registration Authorities to take proceedings against such publishing firms when such evidence of piracy and broadcasting is paramount.

These are a few remedies which may prove a godsend to the smaller architect; they certainly give food for discussion, and incidentally they may be roundly abused as being outside practical application. Though one in these days may revile against the curse of land ownership and feudalism, we have still much to be thankful for even if the small architect does not possess as many privileges as are rightly his due, as in the case of the careful supervision of such building activity in towns such as Eastbourne, Chester, Llandudno, where the feet of the ungodly may never there tread with impunity. Let us take a lesson from a country over the water; it may sound too good to be true, but my informant was reliable and can be accepted. In a particular town a client may wish to build a residence or business premises in the centre of the city and he employs an architect to submit plans and elevations to a certain figure which he can afford. The drawings go into the Town Council for approval; they are turned down owing to unsuitability or poverty of design in elevation—perhaps the architect is to blame. The client refuses or is unable to provide a costly design, then the Town Council not only insist upon his doing so in order to maintain a certain standard of architectural excellence in external features in the town, but assist him financially by means of a grant of money and see that it is done. For example, if the estimated cost of a facade is 25,000 frs., then the town authorities pay 10,000 frs. towards it. I did not stop to pursue the subject further with my informant—he was a ratepayer! He did not seem to mind, but then who does mind when beautiful things are provided? I left him in prodigious wonderment and thanksgiving at this system of doing things. The result is that the city in question is architecturally fine in every respect (there is an extremely capable man in charge of the architectural work). This system is more or less compulsory in every town in the country, from what I could gather.

With such possibilities the lot of the smaller architect is an


NEW VICARAGE
SUNNINGDALE
Section
Section
Tradesmen's Entrance
Kitchen
Scullery
W.C.
Study
Dining Room
Drawing Room
Hall
Cloakroom
Larder
Boot Cupboard
Coal Store
Servants' Sitting Room
Servants' Bedroom
Bedroom
Bedroom

DRAWING N°1

NEW VICARAGE
SUNNINGDALE BERKS

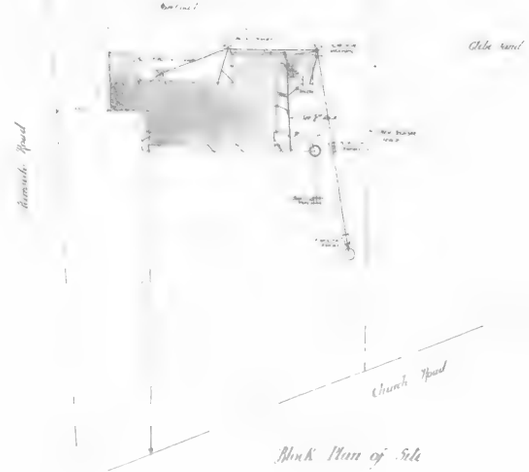
For The Revd W.H. Ainsworth M.C.

This is the drawing marked N°1 referred to in the contract

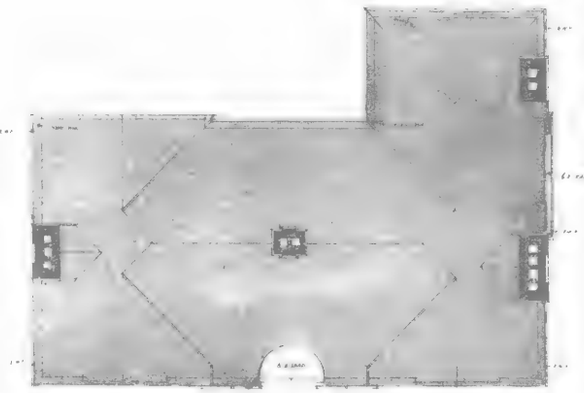
Signed by the said

Witnessed by the said

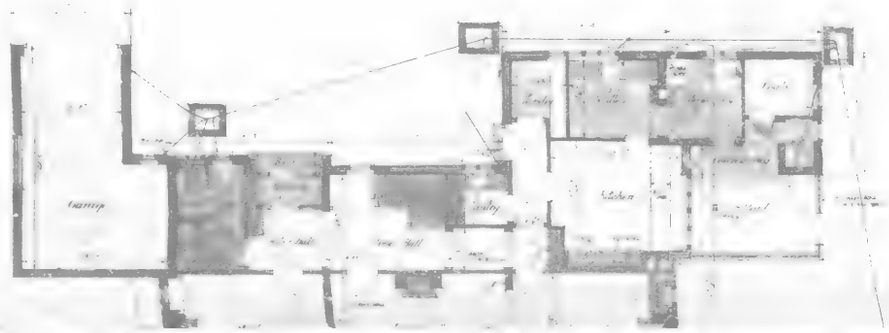
Revd W.H. Ainsworth
Vicar of Sunningdale
March 22 1923

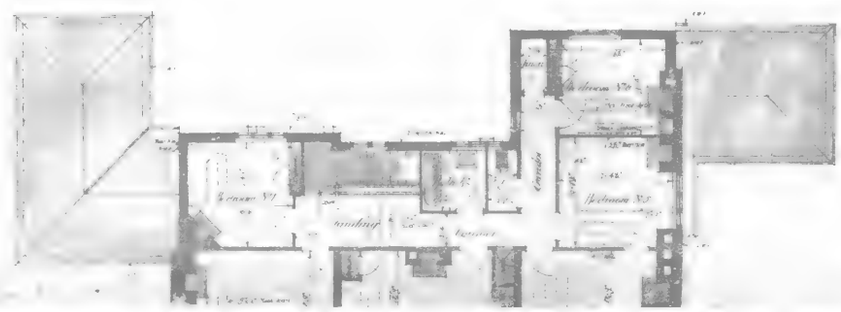


Scale of Feet



Roof Plan





DRAWING N°2

NEW VICARAGE
SUNNINGDALE BERKS

for The Rev^d R.W.H. Acworth M.A.

South Elevation

North Elevation

Scale of Feet.

"This is the drawing marked No^1 referred to in the contract"

Signed by the said

Witness

Signed by the said

Robert H. Acworth
Vicar of Sunningdale
March 23 1903

"INK-PHOTO" WM BROWN & CO. LTD. LONDON, E.C.3.

NEW VICARAGE AT SUNNINGDALE, BERKS.

NICHOLLS & HUGHES, ARCHITECTS.

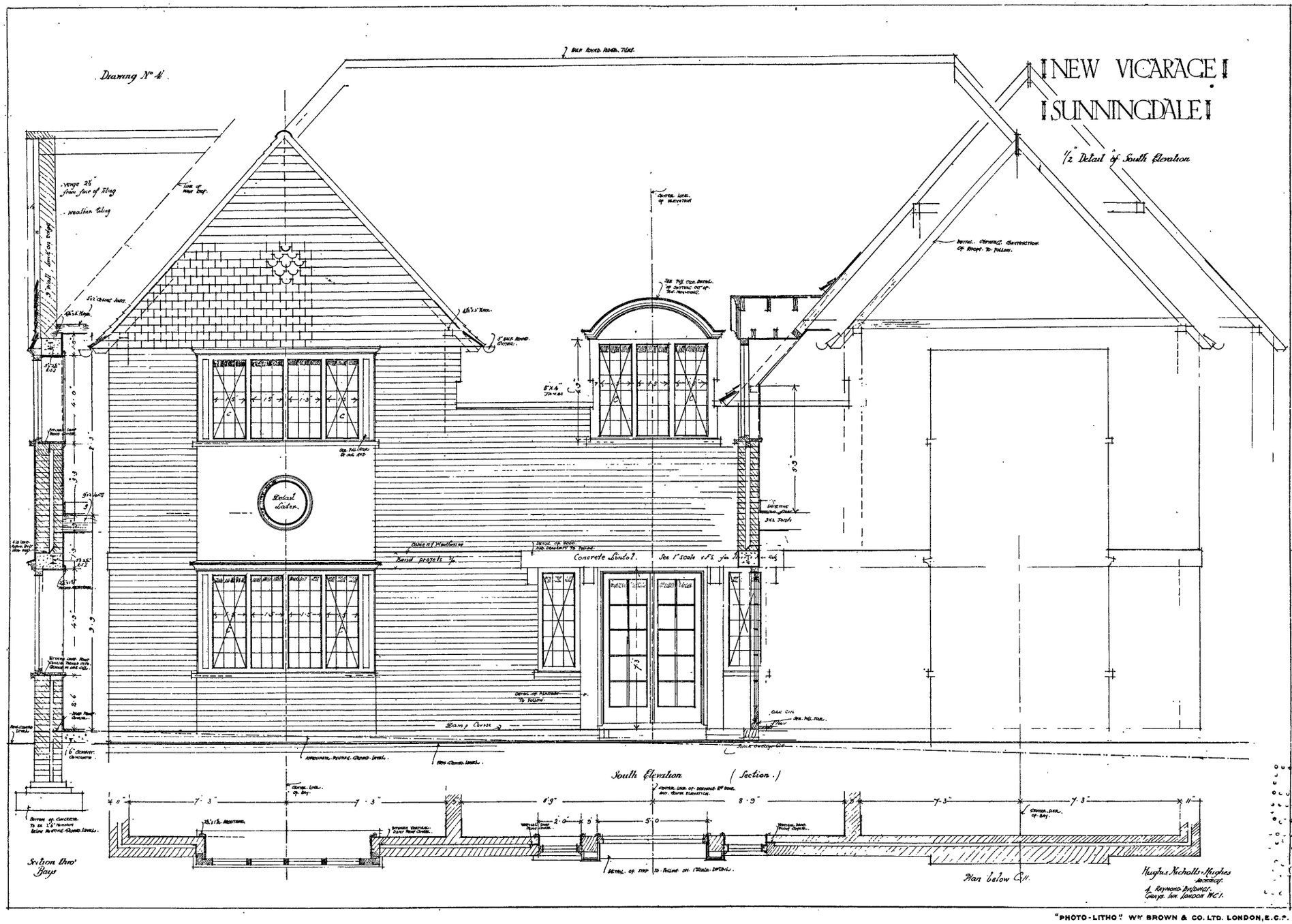
HOSPITAL AND MEDICAL

NICHOLAS & DIXON

"INK-PHOTO" WM BROWN & CO. LTD. LONDON, E.C.3

SCHOOL AT CAIRO.

PAIN, ARCHITECTS.



"PHOTO-LITHO" WM BROWN & CO. LTD. LONDON, E.C.4.

NEW VICARAGE AT SUNNINGDALE, BERKS.

NICHOLLS & HUGHES, ARCHITECTS.

appreciable one. Who knows but with the course of years we may not see the same in England; we are slowly proceeding towards that end.

Yours faithfully,

"AJAX."

"The Small Architect."

To the Editor of THE ARCHITECT.

DEAR SIR,—The two letters on the above subject, appearing in your issue of August 22, are not only interesting but valuable as giving another aspect of the question.

A man's opinion is mainly based on his own experience or the experience of those with whom he comes more immediately in contact.

Mr. Latham rightly says that it is not practical for a successful architect to recommend a less known to a client (although we have known of such an exceptional case), but there are questions of professional etiquette which are more ignored to-day than ever they were.

Two types of breach might be given to illustrate this point. A small architect has succeeded in securing a commission from a good client. He carries it out and gives complete satisfaction. When the next commission from the same client is under consideration he finds that one or more successful architects have been nosing round his client for the work.

2. A small local competition (as so often happened with war memorials). The committee select the design of a comparatively unknown man, but are in doubt as to his ability to carry out the work. They call in a well-known architect to advise. He states that none of the designs are any good and offers to carry out the work himself. We have seen this done even in comparatively unimportant work besides larger competitions. Two of the largest competitions of modern times—Liverpool Cathedral and the London County Hall—have proved that this is the day of the young man. One would like to ask Mr. Latham how the young architect is to gain practical experience if he does not get a start as a young inexperienced man.

History has proved in every walk of life that opportunity is the main factor in success. Undoubtedly architects are born, as he says, but the world has a place for others than Wrens and Hawksmoors.

The abnormal times in which we live, when one person in every fourteen is unemployed, is the real cause of the trouble, but the trouble need not be aggravated by lack of professional etiquette. Architecture is not merely a matter of graphic statics, drainage, acoustics and construction, but a fine appreciation of setting, planning, scale, proportion, massing, composition, form, detail and colour. In the best planning the structural problems are the simplest and the proper harmony between the designer, craftsman and builder would produce fine work.

Every thinking man must agree with "Philistine" that the Architectural Press has done more for the advancement of Architecture in our time than our academic systems.

If architecture can only be carried on as a business and not as an art, let us frankly scrap all chivalrous mediæval notions of professional etiquette and not sign our names to adhere to a code of perfection of conduct which few of us are honourable enough to adhere to.

I am, yours faithfully,

4, Melville Street, Edinburgh,
August 23, 1924.

WILLIAM DAVIDSON.

Concrete.

To the Editor of THE ARCHITECT.

SIR,—The concluding paragraph of your Note and Comment upon my defence of concrete construction as published in "The Observer" suggests that the letter emanated from an untechnical knowledge of the matter. (If so, what weight the letter?) Also that a "technical profession" is a *sine qua non* of exactness in the nomenclature of building construction.

Not being anxious of advertisement for myself, I will waive my right to explain any technical qualifications I possess, merely stating that the subject of concrete has been for many years my constant occupation and study. If the theory and practice of concrete construction, plain and reinforced, is not technical, what is?

If the members of the societies and institutes professedly technical would obtain a first-hand knowledge of concrete, it would have fewer failures and a wider adoption. Half the cement value of present-day concrete is being wasted for lack of this technical knowledge.

Your objection to my designation of mortar and rough-cast as concrete shows a greater intention of cavilling than of thought upon the subject, for we can accept concrete as a material composed of substances cemented together by a substance which, acted upon by water and air, hardens from plasticity to rigidity. Whether of lime and sand hardening into carbonate and silica, or of Portland cement with its great lime content receiving the moisture and air to resilicate, it does not matter. They are concrete if composed of the materials that will harden into the required result. Much of the so-called brickwork of Rome, notably the opus incertum, was concrete, the concrete faces between the inserted pieces of pumice or brick frequently being of larger face area than the tile, brick or pumice, which was probably used as forming a shuttering. Examples may be seen in this country where Roman tiles of about one half inch in thickness have a lime concrete between them of twice their face area thickness. The tiles formed a face or vertical plane which held the plastic concrete in place. Later the concrete held, and still holds, the tiles. This was the opus incertum, used in many cases only to form definite faces or planes of construction.

Some of the earliest concrete constructions were composed of lime, clay, sand and stones to large sizes, a slow-setting concrete which exists to-day, actually containing the ingredients of present-day Portland cement. Then the natural pozzolana, from the volcanic deposits, which is very similar to Portland, was largely used, and made possible much of the Roman architecture.

Present-day rough-cast and cement stucco is absolutely concrete. It is made of the same material, and the difference in sizes of the particles used, either in the matrix or the aggregate, cannot alter the fact that the product is concrete, call it what else you will.

Being, at least, a concrete enthusiast, I thank you for the extra publicity for, and for your favourable comments upon, the material.—I am, sir,

August 25, 1924. SARQUEN.

Book Notes.

The City of London Official Guide. By Charles G. Harper. Published under the auspices of the Corporation. London: E. J. Barrow & Co., 43-47 Kingsway.

We are glad that the Corporation of the City have employed Mr. Harper to compile their official Guide. His articles published by us on the Wards of the City of London showed how intimate a knowledge he possesses of the records of old London. The City of London contains within its small area a greater number of historic buildings than any other area in the country. The Guide contains chapters dealing with the government of the City of London and the historical customs connected therewith, and descriptive chapters covering various areas, Holborn Bars to the Bank, Cornhill to Aldgate, Fleet Street to the Tower, St. Paul's Cathedral, Blackfriars to the Tower by Thames Street, Lombard Street to Aldgate, London Bridge to Bishopsgate, Gresham Street to Liverpool Street, St. Martin's le Grand, Aldersgate Street and London Wall, as well as chapters on the markets of the City, its boundaries and wards, the Liberties of the City, the Bank of England and the Tower of London. It is illustrated by eight photographic illustrations and 28 reproductions of Mr. Harper's own sketches. Where space is necessarily so limited it seems to us to be a mistake to devote several large illustrations to the plate of the City Companies, which has only a very limited interest to a large number of people who will never have the opportunity of seeing it. This is the only thing we can find to criticise in an excellent production which will be found to be of great value to foreign visitors and people from the provinces, who will find information of interest which cannot be obtained from an ordinary guide book.

"Perspectives, Architectural, Geometrical, and the Perspectives of Shadows." By Albert C. Freeman, with 78 illustrations. London: Dranes, Danegeld House, Farringdon Street, E.C.

This is a clear and well-arranged little book, giving the student the requisite information for drawing in perspective, and setting up his views by rule. The rules of perspective are very simple and easily mastered by those who have a fair knowledge of plane and solid geometry, and once the principle is mastered anyone can deal with the most complicated exercises by the practice of a little patience and thought. For this reason a great multiplicity of diagrams is unnecessary, as anyone can readily make them himself as required, and this small book seems to us to contain all that is necessary.

Should Architects Advertise ?

The professions of this country are imbued with a conservatism and rigidity of etiquette that are rather national than connected with the professions themselves.

Our medical faculty, for instance, has refused to recognise or acknowledge new discoveries for some time after the majority of the medical faculties of other countries have done so. Anything that upset, or appeared to upset, the theories hitherto held has seemed revolutionary and therefore not to be tolerated.

It is the same in the Church, the legal profession and that of architecture, surveying and engineering; and it is only when we occupy the dignified position of a solitary minority among the civilised nations that it begins to dawn upon us that there may be something worth considering in the new point of view.

The question whether architects or other professional men should advertise, however, is one with several legitimate arguments for and against. In these day when everybody is the equal of everybody else ; when many people can see no difference between the value of time and thought expended by a man whose education has cost nothing, and another man who has spent years in expensive training with no wage or " apprentice pay " coming in, it is very essential to maintain the prestige and dignity of the profession. On the other hand, advertising is no longer the vulgar remedy of hucksters and shopkeepers ; it is almost, if not quite, one of the Arts. After all, the object of advertising is the same, whether it is to sell the architect's skill or the chemist's pill, and why should a professional man, anxious to make headway, be debarred from bringing his skill and the very fact of his existence before the public ?

It is really not a question of success rewarding ability. There are many clever architects, Fellows and Associates among them, who are struggling along unknown, and without any profitable family or other connection with wealthy firms, estate owners and societies. The bare fact of putting up a brass plate will not bring them business; on the other hand, some of the lucky ones with capital, influence, and a name, are so busy with their factories, mansions, and public buildings that they have to employ salaried draughtsmen to deal with the requirements of their smaller clients. The principals of such architectural firms do very little to the drawings of the less important jobs beyond signing them after approval.

Many of these more modest speculators would rather have the individual attention of a less-known architect than that of a well-known practitioner's drawing-office staff, if they only knew of their existence and the class of design in which they, respectively, specialise. Here is where advertising would come as a great boon to the rank and file of the profession.

The point I am trying to emphasise is this. It is better, in the highest interests of architecture, that the profession should consist of a thousand members, each practising with reasonable success, than that it should only boast a hundred practitioners, all in a big way, and nine hundred salaried employees. The figure are supposititious, but they illustrate the argument.

Advertising would give every man a chance. Lack of competence on his part would very soon send his clients to other and worthier architects, as it would in any other calling. So there is no sense in arguing that advertising would bring success to those who do not deserve it. Efficiency would not suffer in any way.

On the contrary, it would tend to bring into the " limelight " many men with positive architectural genius who are now in obscurity. and who could doubtless improve upon some of the " abortions " of design which are constantly being erected from the plans of men whose prominence in the profession is due rather to money and influence than to love of, and skill, in their art.

I do not advocate the methods of advertising employed by some architects in the United States and elsewhere, which are calculated to jar on British taste. There is no need to do this ; there is no need to emulate the quack-nostrum seller or the " thrill " effect of some Sunday journals. A plain, straightforward advertisement, giving the style and address of the firm, stating any qualifications or special experience, and perhaps with a little perspective line sketch illustrative of that speciality. That would be sufficient ; but it would place plain Robert Brown, A.R.I.B.A., on a competitive level with Sir Thomas Blonks, who is related to Blonks, Limited, and designs all their immense factories.

After all, there are a hundred and one methods by which certain architects can, and do, advertise indirectly. There is the legitimate and harmless painting of his name on a board outside some big works being erected ; there are cute little " pars " that can be engineered in the columns of the Press ; there is the publicity of appearing on charitable subscription lists or in connection with societies or institutions, and there are less worthy means of advertising, open to the man with a fat purse and the influence it carries with it. This is all advertisement, though indirect.

Why not allow direct advertisement, providing it is sober and restrained and consistent with the dignity of the profession ?

CHARLES H. CRAIK.

Is the Mean Architect Unknown?

In architecture meanness does not infer that the professional is sparing of the material he uses in connection with his buildings. In this respect, unless he is building for himself, he has no need to be mean, because somebody else has to pay. To be unnecessarily saving in this respect is stupid, because the professional is paid on the percentage basis. It is mean to be pleasant and charming to your assistants and to ask them to stay overtime without financial compensation, but this class of meanness is not only practised by architects. It is mean to withhold certificates without any apparent reason. It is mean to borrow books from the professional library and never return them. This also is not confined to architects. It is mean to employ ghosts, to make unfair use of your assistants' talents. It is mean to rate yourself too high when suggesting partnership terms to a junior. Nobody is offering an assistant a share in their business unless they have found him useful. When you have a partner, it is mean to underrate his value to others ; this applies equally to junior and senior partners. The old boy may be getting beyond his time, but his practice and reputation are worth something. It is very mean to belittle his merits and value until you have gathered everything into your own hands. The mean architect is never a real success. It shows in his work, in his manner, and clients go to others of less ability in preference to employing an individual of known meanness. Very few architects are mean-minded, though very few are large-hearted enough to give praise to a contemporary's work. They are one and all very hypercritical of other men's work, and none more so than those who produce feeble architecture themselves. It is very mean to endeavour to tempt a client away from a colleague and specially so by underrating his abilities.

Generosity of mind costs very little in actual money, and everybody prefers the man who can praise as well as blame.

Those who are wise will find that they will enjoy life much more by being cheerful over the success of others. Were somebody outside the profession to inform you that some great and brilliant architect had told your friend that you were a very good architect, be you as hardened as flint or granite in your mind, you would be pleased, and would register a vow to endeavour to change your views about that great architect's work.

What a change it would be if we were to enter most of the professional offices and in our interviews hear pæans of praise of the work done by others ! The impression on the whole outside community would be astonishing. The professional status would improve beyond measure. Now, on the other hand, it is the general custom to endeavour to retain your clients and regale your friends with statements detrimental to other members of the profession. This is meanness in a marked degree, mean towards your own chances of success.

It is very mean to order photographs the views of which you have selected, and then refuse to pay for the same. It is very mean to copy other men's work, altering only minor details and signing the result as your own. If you like another man's plan very much, write to him and ask his permission to use it, and in a tactful way suggest some compensation to him. You will gain a friend and a good deal of additional and warranted self-respect.

Building up a Small City Practice.

By Walter O. Kruse, A.I.A.

From "The American Architect."

In maintaining and building up a practice in an average community some fundamental requirements on the part of the individual architect or firm must be recognised. It may not be true that lacking these fundamentals a practice cannot be built up; nevertheless, possession of them will assist materially and will produce an ever-increasing practice of a permanent nature. There are booms in the practice of architecture as there are in retail business, and some ride the rising tide of prosperity and know not why, except that things are surely coming their way. The day comes when they find their prosperity waning, they curse their luck and wonder why.

We must recognise, therefore, as of primary importance in building up a practice the following fundamental requisites. The architect must know the business of his profession and how to conduct it. He must be either technically trained or possess sufficient training gained through early experience in other large offices. A combination of both is to-day essential. The character and integrity of the architect must be of the highest, so as to command the respect of his fellow citizens. An architect is his client's agent and, as such, must have the confidence of his client absolutely. The average client has a remote suspicion that the architect could profit otherwise than by the commission he receives. Such misgivings on the part of the client may be a hereditary weakness and the architect in his dealings with him should dispel any such symptoms by administering the work, through all its intricate phases, beyond the question of a doubt.

The average small town architect finds his practice composed of a greater variety of work, relatively, than his brother in the larger city. His opportunity at specialisation does not exist, due to a lack of repetition, and he is compelled to be informed on most any type of work. Along specialised work he is at a disadvantage many times because the client becomes his only adviser and the work is too often the thought of the client. Upon receiving a commission he may not know much about the particular business the client wants to house, and gaining the confidence of his client is not an easy task.

As a member of a small community, in which he is bound to be conspicuous, he becomes known by the quality of his work. Words of praise or condemnation, from which he cannot escape, are spoken of him by his fellow citizens for whom he either designed a house, remodelled a store front, built a garage or added a sleeping porch. The opportunities for architectural composition may have been very limited, but the opportunity for demonstrating his business judgment, his integrity and his capability of handling men in supervising the work were not lacking. The performance of these duties, satisfactory to his client, perhaps gives him his first real job. And the man for whom he built a sleeping porch may be the director of the bank, who spoke so highly of his qualities as an architect before the board of directors that he was awarded the commission for their new building.

He may also see the advantages of joining the Chamber of Commerce, the County Club and perhaps some fraternal organisations, but he should never use his memberships directly as a means for gaining favour. Such memberships can best be used to make business and social acquaintances. The ability to get a commission must depend upon his reputation, initiative and record of past accomplishments and an attitude of faith in his profession that begets confidence and in turn business. It is well to remember that the public is ever ready to comment upon and exaggerate his shortcomings, but words of praise of work well done are sparingly given. A limited interest displayed in civic service is valuable in that, besides broadening his acquaintance, it keeps him actively engaged in civic progress. As an architect, he should have an interest in the beauty of his city and as a member of a City Planning Commission he will have an opportunity for service. If none exists he should try to organise one.

With all these virtues we find our architect well established in his community and enjoying an enviable practice with a reputation for honesty, integrity and business ability. His work also shows evidence of a thorough knowledge of architectural design, combined with a pleasing distinctiveness that gives to his buildings character and individuality. He has an organisation, is prosperous and justly proud. It will be well at this time for him to give serious thought to his future. It is at this point that many will lose the guiding spirit of their profession. The love they had for it early in life, evidenced by the sacrifices of time and energy, the ambitions they cherished of independent practice, the desire to serve their clients unstintingly, their high ideals, their unlimited enthusiasm, all these admirable attributes must ever and always remain with them and be practised continually. As soon as a feeling of self-satisfaction, of indifference to a client's problems, or a desire to shift work and responsibility to subordinates appears, decay sets in.

It is strange that in business life to-day, if we stand still our next move is backward. We must, therefore, in order to be progressive, expand in the size of our organisation, the amount of our business and in the services we render. What is true of business is true of architectural business. Architects perform personal services and the firm whose service excels in quality and quantity is bound to prosper. What is quality and quantity of service? Every one claims to be giving service to-day, including gas filling stations, department stores and banks. Most of this service, however, is doing something for nothing to please the customer and finds its justification in furnishing leads which bring buyers of gas to the station, shoppers to the store and depositors to the bank. Architects are also confronted to-day with innumerable propositions fostered by ready-cut mail order houses, material supply concerns for lumber, brick, concrete and other things to furnish free plan service as leads for material orders. Many contractors will cheerfully furnish the owner all the plans or blueprints necessary for his building project, whether for remodelling a store front, building a house or erecting a large building. The owner is led to believe that plans are easy to make and can be secured for the asking; that the architect can be dispensed with and that his connection with the work only tends to increase the cost, due to a lot of pet ideas, materials and methods he insists on incorporating in the work, which are needless, out of date and expensive. And many owners believe it the first time and time again.

The sad part of these accusations is that many of them are true and some architects, by failing in their services, make them true. It becomes the duty therefore of every architect practising in average communities actively to engage himself in this problem and seek a solution for the misunderstanding and lack of information on the part of the building public. He should also take a walk around himself and survey his own shortcomings. As a designer his work may be beyond criticism, but when it comes to sensing the pulse of his client and trying to solve some of his difficulties, he thinks too often entirely of appearance, composition of plans, exterior elevations and details. His client, however, sees only unjustified expense and loss of income. The mental attitude of the two do not dovetail. The client is not convinced of the economic necessity of the architect.

The architect can improve his case and regain his prestige in the estimation of the building public if he will face these conditions squarely and talk in a language that the public understands. If the public can get a service that combines financing, architecture and building, tries it and likes it, there must be something about it that appeals, of which the architect is not aware. If the architect in his own opinion can offer a service that is more just, more efficient and protects the interests of both the owner and the builder effectively, let him proclaim it and in no uncertain terms. Instead of submitting sketches gratis to promote and build up a practice, which is a source of evil in a small community,

he might try to sell himself, his organisation and his services by a well studied sales talk that a client can comprehend. By presenting an outline of the value of architectural advice, both technical and artistic, an architect can make his appeal so conclusive that the client will find such services indispensable. A few lessons in salesmanship would be very beneficial. After trying this out several times and taking note of what line of arguments produced the best results, a series of bulletins or pamphlets can be prepared. These should be distributed in proper sequence in personal letter form, and should cover all the items that an owner should be acquainted with when he contemplates selecting architectural services.

The architect should be able to advise the average speculative builder (and I use the term in the sense of an owner building(for resale or for income producing property) on some matters concerning which he would be glad to have information. He would like to know, besides the cost of his building, the probable rentals that he could expect, the cost of operation, the amount of taxes, insurance rates and the like. He might appreciate the architect's assistance in making financial arrangements through the banks or a bonding house. A prospectus of a building project can be easily prepared, giving a brief description of the proposed building with floor plans and a perspective. Such an outline is particularly desirable if the building is for any organisation depending upon its membership or the public for support. In other words, the small town architect can take an interest in the legitimate promotion of such enterprises without jeopardising his standing as a professional man.

After a job is completed it is well to keep a point of contact with his client. A visit by the architect or his superintendent going through the building, inviting suggestions or criticisms, will show the owner that the architect has a continued interest in his particular job. The old clients are the best advertisers the architect has. How they advertise him depends usually on how successfully the architect has served them. And in this no distinction can be made in the size of the job. All operations are equally important to the client and to let anyone feel that he is bothering the office with a small job does not build good-will.

Every client expects the architect to give his particular job personal attention. He likes to know that the architect is doing this or that himself and not delegating too much of his duties to his assistants. To delegate some one in the office to meet Mr. or Mrs. Client is apparently accepted gracefully but the client's feeling of importance is offended. He expects personal service and it is on this point that the architect must use and practise all the diplomacy and tact at his command. Naturally, if his practice is of average size he cannot meet all of his clients on every occasion, much less make all of the drawings and do all of the superintending. Here again, after he has the confidence of his client, he must in turn take the different men in his organisation and have them sit in on conferences to obtain the different aspects of the job, saying nothing at first but usually a great deal after the job is under way. And in building up his organisation he should surround himself with men of ability and competence, whose reward for loyalty should be justly compensated.

In a small city, in particular, the architect must not confuse his obligations to his client with outside activities. The client's claims on him should be paramount. This may not be true in larger cities but it is difficult and may be disastrous to ignore in the small city. The point of view of the average client is that the architect should adjust his time to suit the convenience of his client. This may call for conferences in the evenings, Sundays and holidays. A golf game, a family outing, or an evening dinner engagement cannot be offered as excuses. This demand of time is justifiable for preliminary and urgent conferences until the client can be brought around to see the wisdom of holding them at the architect's offices during regular hours. Meetings with building committees, however, are often difficult to arrange for except at their convenience.

In conclusion, a word should be added regarding the architect's relations with the building crafts. No matter how perfect the drawings may be or how complete the specifications, in the last analysis the success of the building is in a large measure dependent upon the builder. His organisation must rise to the occasion. Wisdom in the selection of bidders for particular work is important. A reputation among the builders for fairness and honesty in administering the work is a factor that builds up a practice, because it makes for successful operations. An architect who uses his power in a purely arbitrary manner, is dictatorial and functions with self-assumed authority at the contractor's expense will not fare well. Plans and specifications should be complete with no uncertainties. Then demand of the builder the execution of the contract according to the terms imposed. Any discretion the architect may have in placing an interpretation on uncertainties should be settled justly to both parties. The builders realise their responsibility to society and are trying to conduct their business to render perfect service, and in this effort the architect should give them unqualified support.

DECORATIVE FIGURE.
(Modern Australian Design.)

Building Progress.

The Liverpool Victoria Insurance offices in Southampton Row, Bloomsbury (London), occupy an important site stretching from Vernon Place to Bloomsbury Street, and encroaching considerably upon the east side of Bloomsbury Square. At present only the northern section of the building is being constructed, but even in its very unadvanced condition it looks as if Mr. C. W. Long, F.R.I.B.A., the architect, is providing a work which will be an ornament to the thoroughfares concerned. The general contractors are Messrs. James Carmichael (Contractors), Ltd.; Dorman, Long & Co., Ltd., are responsible for the steelwork; the Bath and Portland Stone Firms, Ltd., for Portland stonework; Willment Brothers, for sand and ballast; F. A. Norris & Dutton, Ltd., are carrying out the heating and ventilating; C. Isler & Co., Ltd., are responsible for artesian wells; and the general contractors themselves are constructing the floors on a system known as the Econoflor (Patent) Reinforced Concrete Flooring. This imposing Renaissance block marks the commencement (or almost the commencement) of the transformation of one of the old squares of the metropolis, Bloomsbury Square having been formed in the year 1670.

No. 12 Red Lion Square, to be the new offices of Messrs. Austin Reed, Ltd., designed by Messrs. Westwood & Emberton, architects, is in course of reconstruction by William F. Blay, Ltd. The building is at the corner of Dane Street, and in part stretches back into Eagle Street. Carrara (or similar) ware is being used for the facing. Redpath, Brown & Co., Ltd., are supplying the steel.

The vast superstructure of the buildings at Holborn Viaduct Station is in the hands of Woodward & Co. as general contractors for any alterations decided upon. F. A. Norris & Co. are engaged for the requisite iron staircases, and Engineering Works (Electrical and General), Ltd., have the electric lighting and power in hand.

In Pall Mall (at No. 69), the Midland Bank, Ltd., are erecting a branch, with the following firms concerned:—Hall, Beddall & Co., as general contractors; F. J. Barnes, for Portland stone; Fenning & Co., Ltd., for granite; Bell Brothers (London), Ltd., for electrical installation; Marley Brothers, Ltd., for ornamental bronze work; Thomas Faldo & Co., Ltd., for asphalt; the firms of Henry White & Son and Rosser & Russell, for heating; Express Lift Co., Ltd., for lifts; Burn Brothers (London), Ltd., for h.w. installation; and Morris Westminster Metal Works, for metal windows.

No. 419 Oxford Street (at the corner of Lumley Street) presents an extraordinarily interesting appearance, with its four-storey all-bronze façades, enclosed between the Portland stoned ground and attic storeys. It is true that there is a connecting stone pilaster at either end of the bronze-fronted storeys, but these serve only to emphasise the pervading metal. Messrs. F. D. Huntington, Ltd., are the contractors here (as they are for Selfridge's extension opposite); Duncan Watson & Co. are seeing to the electric lighting, and Hammond Brothers and Champness, Ltd., are supplying the lifts. The super-ground-floor stonework is treated as a blind balustrade, and thus considerably adds to the unusual character of the design.

F. W. Woolworth & Co., Ltd., are erecting new 3d. and 6d. Stores in High Street, Kensington (London). We see here a similar facing to that employed at the firm's new premises in Oxford Street; that is to say, broken white glazed terra-cotta, supplied and fixed by Shaw's Glazed Brick Co., Ltd.; the material is stated to be burnt by gas.

In the same thoroughfare, Barker's new stores are in process of erection, from the designs of Mr. H. L. Cabuche (the architect to the company) and Sir Reginald Blomfield, R.A. Messrs. P. & W. Anderson are the contractors, and Considére Construction, Ltd., are carrying out the reinforced concrete. The Limmer & Trinidad Lake Asphalt Co., Ltd., are doing the asphalt work.

We referred recently to the large offices being erected in Gresham Street by the Swiss Banking Corporation. Further west along the thoroughfare, we notice another large block in a less advanced state, but all the same showing good progress. Nos. 45-47 Gresham Street and Nos. 22-26 Wood Street are being erected as offices, the total floor area arranged for being 67,000 feet superficial. There will be a private loading dock, a goods lift to all floors, receiving and despatching room, central heating, and other conveniences. The building will be stone-faced. Messrs. W. H. Lorden & Son, Ltd., are the building contractors, and other firms engaged are as follows:—Dorman, Long & Co., Ltd., for steel-work; Alfred Williams & Co., Ltd., for artesian wells and pump; Express Lift Co., Ltd., for lifts; and F. A. Norris & Dutton, Ltd., for heating and hot water supply.

Messrs. Trollope & Colls, Ltd., are erecting the steel-framed buildings over Mansion House Station, or, rather, in connection with them. Messrs. Archibald D. Dawnay & Sons, Ltd., are supplying the steel.

The Strand is continuing the process of transformation, which was commenced many years ago with the building of the Savoy and Cecil Hotels. The old premises at the corner of Wellington Street have been demolished and are to be replaced by a building for which Mr. F. G. Minter is the contractor, the steelwork being supplied by Dorman, Long & Co., Ltd., and the asphalt by Thomas Faldo's firm.

Further west, Messrs. Ford & Walton, Ltd., are rebuilding No. 112; Griggs & Son, Ltd., Nos. 110 and 111, and Rice & Son are rebuilding Nos. 105-109.

Mr. F. G. Minter is also erecting for the architects (Messrs. Yates, Cook and Darbyshire) the new premises on the site of Coutts' old banking establishment. The steelwork is in the hands of Smith Walker, Ltd.

An important piece of work is in hand in the new premises of the Automobile Association in Leicester Square, London, where Arthur Vigors, Ltd., is the general contractor, C. H. Mabey being engaged for the stone carving. The steelwork is being carried out by Smith, Walker and Co.; the electrical installation by Mann, Egerton and Co., Ltd.; S. Mullinar, Ltd., for heating and ventilating; Waygood-Otis, lifts; B.V.C. Vacuum Cleaning installation by the British Vacuum Cleaner and Engineering Co., Ltd.; Carron Co. for ornamental C.I. window fronts; Morris Westminster Metalworks for metal windows; Thomas Faldo and Co., Ltd., for asphalte. It is a stone-faced building of Renaissance design.

Nos. 174, 176 and 178 Regent Street (not far distant from the Quadrant) form a one-design frontage, with varied treatment for the central portion, the wings agreeing, and all three harmonising. The design is Wrenesque, with carving after the fashion of Grinling Gibbons. The general contractors for the central block, No. 176 (for the Gophir Diamond Co.), are Walter Lawrence & Son, Ltd.; Stanley Jones & Co., Ltd., executing the metal shop fronts. For Messrs. Goodyers' premises, No. 174, Bovis are the general contractors; Crittall Manufacturing Co., Ltd., are carrying out the metal windows; Waygood-Otis lifts; and Ohms, Ltd., for electrical installation. This centre block forms a fairly plain, at any rate, a restrained, façade set off by more elaborated wings. Ciro Pearls, Ltd., are at No. 178.

Referring elsewhere to the Wrenesque treatments of some of the Regent Street frontages, such again is found in the new building in Piccadilly, which has taken the place of the original Wren block, for so many years known to Londoners. The old building was the Vestry Hall to the church of St. James, Westminster, also the work of Wren. Fortunately the church still remains, and fortunately, too, a new Wren-inspired block has risen phœnix-like on the site of the demolished Vestry Hall. The unconfined treatment of the stone carving on the façade is a pleasant feature, recalling the treatment accorded by Wren to St. Benet's Church, Blackfriars. E. A. Rcome & Co., Ltd., are the general contractors; Sulzer's for heating; Bell Bros. for electrical work, and George Jennings, Ltd., for sanitary work.

Morley's College for working men and women is being established in fresh premises in Westminster Bridge Road; the premises are not altogether new, but considerable extensions and alterations are being effected, with Messrs. Dove Bros. as general contractors; William Frere for hot-water supply and plumbing; Locke and Soares for electrical engineering; the Improved Asphalte Co., Ltd., for Rome-mosaic, terrazzo and patent flooring, etc. This is one of the many buildings held up by the regrettable interruption to building works.

Mr. J. B. Cridley has just designed a most attractive little house, which is in course of erection in Oakley Street, Chelsea; the rush of applicants has had to be stemmed, as the house has been specially built for a client. Mr. F. J. Barrett is the builder, and Messrs. Jackson and Boyce are carrying out the electric lighting.

General News.

BIRKENHEAD.—Tenders are to be invited for a store for the water department.—Plans passed for the showroom and warehouse in Hamilton Street, for Messrs. W. Bernard, Ltd.

BRISBANE.—A number of new buildings are to be erected, amongst which the following are of interest:—Swimming baths, £20,000; municipal warehouse block, £48,000; new buildings at the rear of town hall site, £37,000. The tender for the superstructure of the new city hall has been placed with Mr. D. D. Carrick, £506,375, the building to be finished in five years.

BROOKWOOD.—£7,570 is to be spent on improving the heating installation of the mental hospital.

CHERTSEY.—School clinics to be erected at Chertsey and Malden.

CHRISTCHURCH, N.Z.—Messrs. Greenstreet & Anderson's design for municipal offices accepted; also the tender of Mr. W. Williamson, £40,987. Memorial Bridge at Cashel, Messrs. D. Scott & Sons' tender accepted at £16,078. Messrs. Gummer, Prouse & Auckland were the designers.—The city surveyor has prepared a scheme for a concert hall to cost £35,000.

CROYDON.—A new site to be acquired on the London Road for public baths.—New slipper baths, etc., are contemplated in Gloucester Road.

ELLESMERE PORT AND WHITBY.—Loan sanctions for £86,250 have been granted for houses.

FINCHLEY.—Sewer reconstruction at Totteridge Lane. Loan granted, £4,100.—Electricity extensions to be executed to the total value of £17,750.—A scheme for a central depot to cost £10,000 is recommended.

HULL.—Plans passed for 10 houses, Southcoates Lane, and 12 houses, Beverley Street, for Mr. Barnett. Sanction has been sought for a further £40,000 for housing subsidies.

LEEDS.—Loan of £6,500 sanctioned for elementary school at Meanwood.—Application has been made for a loan of £2,500 for additional accommodation at the sanatorium.—Library Committee has suggested a suitable site in Compton Road for a branch library.

LLANDUDNO.—Application has been made for a loan of £8,300 for housing in Howard and St. Seiriols Roads.—Amongst many suggestions for winter work, a new golf house and band-stand are included.

LONDON DOCKS.—New passenger landing stage at Tilbury. Single-storey warehouses for tobacco, with overhead travelling cranes, are also to be erected by the Port of London Authority.

STOKE-ON-TRENT.—Sixty houses are to be erected in Belgrave Lane for Messrs. J. Grant, Ltd.

TILBURY.—Dock development: New dry dock to be constructed to cost £1,138,000. Tenders are to be invited by the Port of London Authority; the estimate includes approaches.

TORQUAY.—The Victoria and Albert Hotel is to be enlarged.

UXBRIDGE.—U.D.C. borrowing £34,000 for the erection of 58 houses at Hillington site.

WORTHING.—New sports ground of 10 acres at Broadwater, to cost £5,000.—New post office to be built at Gloucester Lodge.—A new store and depot to be erected at the rear of Tudor Lodge by the Corporation.—"Fairlawn," Chapel Road, is to be purchased for new municipal offices.—Plans passed for 14 houses in Church Walk, for E. H. Barton.

Trade Notes.

Change of Address.

The old-established firm of heating engineers, Messrs. Vincent Roberts & Co., Leeds, have now removed their works and offices to Ellerby Works, Ellerby Lane, Leeds. The founder of the firm, Mr. Vincent Roberts, continues his association with it. Mr. J. W. Dickinson, who has been connected with the firm for the past twenty-five years, and Mr. Kingsley Roberts, who previously to taking an active part in the business had some years of practical training with a well-known firm of Leeds engineers, are now partners, and will give their personal attention to all work entrusted to them. Messrs. Vincent Roberts & Co. have carried out in the past many important heating contracts for architects in Yorkshire and in various parts of the country to the satisfaction of their clients, and may be counted upon to maintain their reputation for good work. Their telephone number is Leeds 26356 and telegraphic address Drying, Leeds.

Roofing at Wembley.

The roofing at Wembley cannot escape the attention of the most casual visitor, who is apt to take such technicalities for granted. From the point of view of the constructional expert it has many features of considerable interest. Not the least conspicuous is the method of interior lining adopted in some of the

largest of the Exhibition buildings. The photograph reproduced is taken in a corner of the Palace of Industry. This and the adjoining Palace of Engineering carry the largest roofing areas in the grounds and have created new records in the roofing of large spaces. In both cases—as also in other buildings at Wembley—asbestos-cement panelling has been used for the lining, and the use of this medium demonstrates its practical and artistic possibilities, which have a wide range of application. The sheets used are "Poilite"—a tough grey substance that is practically everlasting in service. "Poilite" is particularly adapted to employment for this purpose since it is resistant to fire, rot and corrosion from chemical fumes. It is also an insulation against external temperatures and is not affected by vibration. Although self-preservative "Poilite" lends itself to a variety of decorative treatments, and some of these, as well as the method of panelling, are illustrated at Wembley. The same material supplied in corrugated form for roofing and cladding is also to be found at Wembley, and is known as "Everite." A specially sturdy form has recently been placed on the market under the name of Everite "Bix Six," and this offers notable structural advantages both in economy of material and ease of handling. The two large restaurants near the S.W. entrance of the Exhibition are roofed with "Bix Six."

The application of "Poilite" to tiling work is demonstrated in the fine gabled roof of the model dairy exhibited by the National Milk Publicity Council. The old world lines of this steep-pitched gabled roof are displayed to the best advantage by a roofing scheme of russet brown pantiles. These tiles, although still practically new, are remarkably mellow in tone, and the manufacturers state that this mellowness tends to become accentuated with exposure. Moreover the area under tiling, though large, is never monotonous to the eye, since the tiles have a varitone shading which, while not uniform, is pleasantly graded and very attractive. It is safe to suggest that the appeal of artistic roofing to the general public will be increased by this striking demonstration of good craftsmanship. From the practical point of view "Poilite" pantiles, in common with other varieties of the same make, allow a notable economy in substructure by reason of their lightness as compared with clay tiles, while their first cost is relatively lower. "Poilite" tiling compares very favourably with any of the older forms of roofing in service, since its composition is entirely unaffected by climatic conditions and does not crack, flake or warp with age. The "Poilite" and "Everite" specialities are made and supplied by Bell's Poilite and Everite Co., Ltd., Southwark Street, London, S.E.1, and Peter Street, Manchester.

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Sheffield.*

Professor Abercrombie explains in his introductory note that the first part of the Survey is based on matters of fact over which there can be no dispute, these facts for the most part having been collected and arranged by the technical officers of the Corporation; while in the second part of the volume the author expresses his opinion as to what should be done in the future.

The various studies which the author has made of other towns and localities are interesting and instructive, but they must be considered in relation to an unknown denominator—that of national prosperity and growth—and the conclusions arrived at may be partially invalidated though sound in themselves if a mistake is made as to the denominator to be used.

In no case is this more obvious than in relation to our great manufacturing towns. Sheffield owes its existence and even more certainly owes its growth to the fact that it is naturally well placed as a manufacturing centre for iron and steel goods. It has enjoyed the advantages given by the position of the coalfields and the accessibility of iron ore, and though the latter has been chiefly imported from abroad for over a century, the natural advantages of Sheffield have enabled it to maintain its great position as a primary manufacturing centre. Under a system of Free Trade the denominator which measures the amount of profitable trade to be done must be that of relative cheapness of any commodity, and the growth of Sheffield or of any other city will be chiefly determined by this factor. On this will in the end depend its rate of growth, and this will determine the ultimate size of Sheffield or of any other city.

It is quite evident that the town planner's prescriptions, like those of the doctor, must largely be governed by diagnosis of the disease, or in this case by the factor of future growth. And in the case of Sheffield, the ratio of growth will be governed by its ability under natural or artificially produced conditions to manufacture steel goods at prices and of qualities to compete advantageously with foreign goods of the same kind.

For this reason we believe it may be safest to take a conservative estimate of the future expansion of our towns, and we think that the soundest policy is that which aims at the removal or gradual elimination of defects within a built-up area rather than in outward extensions, which may not justify themselves in the future.

The problem is an enormously difficult one, as the central areas of most towns are built along lines which originally formed village centres, which can be compared to an attempt to confine a man's heart within the space occupied by a similar organ in childhood. The resulting effect of this extreme case of congestion is to induce many of our civic planners to assume the necessity for a ratio of expansion which in many cases will prove to be unjustified.

The population of urban centres must necessarily increase, but if the trade proper to that centre does not expand the increase of population will tend to disperse itself automatically, the factor governing the city's population not being the births within its area but depending on the number that can be employed within its confines.

The remainder must either find an outlet by means of local or national emigration.

We can see no justification for the popular belief in the great future expansion of our urban districts, though increased facilities of transport do undoubtedly tend in the direction of spreading population over wider areas.

As we have said, the first part of the Report is taken up with a very full and comprehensive analysis of existing factors such as industrial conditions, population, housing and health, open spaces and other amenities; the second part of the Report dealing with zoning, suggestions for street and road improvements, central improvements and park system and railway improvements.

Zoning, or the concentration of certain activities within definite limits, is one of the greatest of modern improvements. Industrial and residential districts should be defined and separated and the separation is usually dictated by fairly obvious natural conditions. In most of our towns zoning regulations with regard to future constructions would produce economies, and the zoning ordinances of New York have already resulted in a large increase of rateable values. Zoning carefully considered is undoubtedly applicable to our towns and would result in a marked improvement, as at present the value of a building or site may often be destroyed by some neighbouring development.

We entirely endorse Professor Abercrombie's suggestion that the most valuable form of open space is rather the strip of wooded open country than the more concentrated park, since it brings a larger area within touch with the open space formed, and the specific suggestions made appear to be well considered and planned.

We also think he is right in his suggestion that a system of satellite communities round Sheffield is not required on account of the exceptionally open and beautiful nature of the immediate surroundings of the city. Here, too, the question of economy comes in. A satellite town must be provided with public buildings and other amenities to make it attractive, and these new buildings are more expensive than the enlargement of the scope of similar amusement and recreative centres in the city itself.

The suggested improvements for Central Sheffield include bringing the two railway lines—the Midland and Great Central—into one central terminus in the centre of the city, with a spacious place approached over Exchange Street by a bridge. Alternatively, it would be possible by a useful cross road from Nursery Street across the Wicker and the Don to Aston Street to provide a direct connection from east to west without entering the centre. New and improved markets are required and the existing position appears most suitable. Fitzalan market is swept away to afford room

* Sheffield Civic Survey and Development Plan. Report by Patrick Abercrombie on the Scheme prepared for the Development Committee in collaboration with R. H. Mattocks. The University Press of Liverpool, Ltd. Hodder & Stoughton, Ltd., London. 20s. net cloth, 15s. paper.

for a tram centre. Norfolk market is left untouched, and Castlefolds and Sheaf markets would be rebuilt between Exchange Street, Exchange Place, Commercial Street and Shude Hill, the latter forming a low level approach to a wholesale section.

Various schemes for improving the shopping streets are dealt with in the Report.

Owing to the great diversity of levels a ring road round the city is impracticable, but from Pennistone Road near the Don at Owlerton through Brightside to Abbeydale Road on the Sheaf at Beauchief, a good half-ring is obtainable, which will have the double advantage of opening up land on the lower Don valley and allowing through traffic to miss the centre of the city, relieving Attercliffe Road.

We have only alluded to a few of the many points dealt with in a most interesting Report, the conclusions in which are very sound in so far as they deal with problems of "trimming up and local improvements."

The main issue—the ultimate size and requirements of greater Sheffield—must entirely depend on the future of its industries, which are doubtless among those which may have a long and difficult struggle before them in the face of the foreign competition of countries having many natural and artificial advantages.

Our Illustrations.

DEAL AND WALMER WAR MEMORIAL HOSPITAL. Messrs. H. Percy Adams, Charles Holden & Lionel Pearson, Architects.
VIEW OF A CHATEAU AT VIZILLE.
WEST ENTRANCE TO CIRCULAR CHURCH AT VILLARD BONNOT.
VIEW OF MAIN STREET AT VIF.
A 17th CENTURY CHATEAU AT SASSENAGE.
PICTURESQUE VILLAGE AROUND GRENOBLE.

Notes and Comments.

An Unattractive Competition.

The management of the Imperial Hotel are attempting to hold a competition for designs for a hotel in Woburn Place, but they think that all they require are designs for the façade. They consider that they cannot learn anything from an architect as to planning; neither do they propose to submit the designs received to an assessor. We believe they hold out some sort of hope that they will obtain the advice of a "practical" builder which, in addition to their own wisdom, will guide them to the solution required—a scheme good enough to secure the approval of the estate authorities, cheap enough to involve little expense, and, we suppose, "showy" enough to attract attention to their building. The whole proposal is cheap and nasty and an insult to the profession whose aid is sought, and we are not surprised at its being black-listed by the R.I.B.A.

A Useful Book.

A most useful reproduction of James Gibbs' Rules for drawing the Several Parts of Architecture has been published by Messrs. Hodder & Stoughton, at a price of 10s. 6d. and Mr. Christian Barman writes a very scholarly and interesting introduction which, better than any analysis we have read, conveys to the reader a just idea of the magnitude and beauty of imagination underlying the conception of the orders of classical architecture. Mr. Barman has a fine gift of expression and such sentences as the following are extraordinarily vivid: "The Greeks were not ignorant, they were not provincial, but they were sufficiently conservative to pronounce sentence of death upon Socrates; and if they have remained faithful to their simple trabeate architecture, raising it to a studied exaltation it has never attained before or since, it is because they valued economy above profusion, an enduring balance above the hazardous embrace of thrust and counter-thrust, and chose to picture the civic procession under the porch rather than to set a hundred monsters leering from parapet or shady nook."

The book is republished in a most convenient form and will prove of greater use to most architects than the more cumbrous volumes of which it is a clear reproduction.

An Irish Scheme.

It is proposed to build 1,500 houses on the north side of Dublin on a site of 160 acres and at a cost which is estimated at £1,000,000 and which will provide continuous employment for 3,000 men for from three to four years. This scheme is in addition to the new proposal at the Marino under which from 1,200 to 1,500 houses are contemplated. An interesting feature of the proposal is the establishment of a colony of Irish speakers who will be provided with a selection of houses (free ?).

These gentlemen's aim in life is to be to foster the use of the Irish language by bringing those who can talk it into Dublin. This doubtless will help to allay the impatience of the 5,000 people whom we understand are waiting for accommodation, but whom the witchery of the native language and possibly a little melody on the Irish harp will keep quiet and happy while the 3,000 men work for three, four or perhaps five or six years. We do not wonder that the cost of running the Free State precludes the boon of freedom from taxation.

Mr. Topham Forrest's Pilgrimage.

Mr. Stanley Baldwin visited America and came back having concluded an agreement for the repaying of debt which caused many people to draw a long face. Mr. Forrest goes with the object of finding a way to lighten burdens which press heavily upon those who build in London, for his avowed object is to discover in what manner the Building Acts here can be rendered less onerous. We hope he will come back with suggestions which may result in shortening the cumbrous mass of Acts we have to deal with into a short and simple code, and one which will give district surveyors a great increase of discretionary powers.

We have often wished that a special body could be constituted which would have powers to consider the case of any big and complicated scheme on its own merits and which might in its wisdom give relief from the operations of iron-bound regulations when the objects aimed at seemed to be effectively met, if by unusual methods. We are sure that building owners would in such cases be willing to pay special fees which would render such a tribunal self-supporting.

Some of our contemporaries appear to think that Mr. Forrest wishes to pave the way for the introduction of sky-scrapers here, but these writers are a little behind the times or they would know that the skyscraper is out of favour in the land of its birth, for these high buildings have been demonstrated to be unremunerative.

L.C.C. Housing.

The London County Council are issuing a small series of booklets at 6d. each which describe the work it is doing for London, and one of these on "Housing" has been sent to us.

We have always admired the excellent work done by the Council in housing, and the L.C.C. may claim the credit of having done excellent pioneer work long before the subject became a popular one. More than this, their housing, like their schools, are excellent examples of reasonable and

pleasing architectural design, and schools and houses are equally free from the crankiness often seen elsewhere. The Council has in all cleared away 50 acres of slums and provided tenements or houses for over 100,000 people, about equal to the whole population of towns like Wolverhampton or Halifax.

In 1892 the Council had provided accommodation for 174 people and received rentals amounting to £629 a year; in 1924 it provides accommodation for 119,316 persons and receives rentals amounting to £670,600. More than this, till quite recently its proposals were always based on sound finance and the property built would have come into the possession of the authority with all debt wiped out after a term of years. No other body in the country has managed this branch of their activities more successfully, and the buildings erected are bright spots in many of the dingiest and most sordid districts of London.

The Repair of Roads.

We are glad to see that among the proposals of the Government in connection with the relief of unemployment it is proposed to spend money on the repair and improvement of existing roads as well as the construction of new ones. This is a step in the right direction, though perhaps not a very courageous one. The state of our roads and the consequent increased expense of their upkeep has chiefly been brought about by the increase of swift and heavy motor traffic, and it is totally unfair that such a burden should fall on local rates. By sending goods in lorries by road manufacturers save the cost of transit over the privately owned railways, but the saving is effected at the cost of local authorities, for the manufacturer or motorist pays nothing except the rates within his own district except in the form of the petrol tax. The proceeds of that tax should in justice be allocated not to new roads which will chiefly be of service to motorists but to the repair of the damage caused by motor traffic to existing roads. We entirely disagree with a policy the result of which is to provide the section of the population with new facilities for locomotion at the expense of the ratepayers of various districts, it is unfair to the public as a whole and unfair to the railways who have had to pay heavily for everything they have required. Incidentally, what is a free endowment of motor traffic tends to decrease the profits of the railway companies and postpones the day when it will be possible to reduce railway rates. Nor do we believe that the commercial wants of the country render many of the proposed roads a necessity, though much may be effected by minor improvements to existing roads. A feature of the Government's proposals which we do not like is that public authorities will be bound to keep separate accounts of the money they receive from the State, this involving extra book-keeping and supervision. It should be easy to arrive at a figure representing a local authorities' normal expenditure and either give it a fixed sum for extra work or else pay it for the additional sum expended within specified dates. We do not believe that local authorities or those representing them should be treated with suspicion.

Competition News.

HALLS FOR GLASGOW.

Glasgow Corporation recently arranged a competition for plans of two halls in London Road and Charles Street, Bridgeton, Mr. James Lochhead being the assessor. Ninety-eight sets of designs were submitted and the assessor has made awards as follows:—£150 premium, Mr. C. Cowles-Voysey, 14 Gray's Inn Square, London. Cost of scheme £25,300. £100 premium, Messrs. D. M'Naughtan & Son and John Arthur, 164 Bath Street, Glasgow. Cost £27,300. £75 premium, Mr. Walter Alison, 27 Kirk Wynd, Kirkcaldy. Cost £25,100. £50 premium, Messrs. Harrison & Ash, 22 Ellison Place, Newcastle. Cost £27,700. Commenting upon the first premium design the assessor says that the design is presented by a set of most careful and refined drawings, with a scholarly elevation—well thought out plan.

The Denham Fisheries Estate.

This unusually attractive building estate has come into the market. It is 572 acres in extent and well served by roads. It includes a beautiful stretch of the valley of the Colne and abuts at the lower end on Denham Station, which is 16 miles from London. The estate contains a large modern house known as

SAVOY FARM FROM TENNIS COURT.

the Fisheries and a delightful old manor house known as the Savoy Farm, part of which dates from the thirteenth century, but which in the main is an untouched house of the Tudor period. We give a couple of small illustrations of this house, which is one of the finest we know in the district and well worth

SAVOY FARM BEDROOM, DECORATED WITH EARLY 17TH CENTURY FRESCOES.

the consideration of those to whom age, associations and beauty appeal. One of the bedrooms which we illustrate is decorated with frescoes depicting scenes from the life of Moses and dated 1606. The group of outbuildings include two fine barns of about the same date as the house.

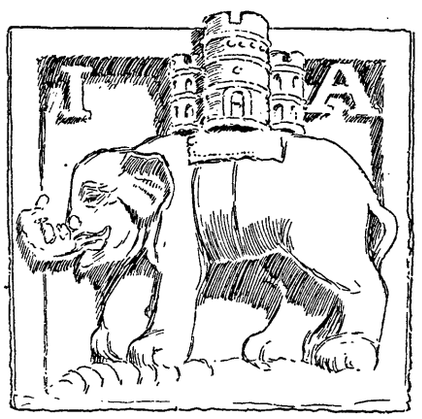
MERTHYR TYDFIL.—Two specimen concrete cottages are to be built by the Edison-Duncab Company at Penydarren. Reports are being prepared in respect to 72 houses at Troedyrhiw. Medical Officers reports include an expression of need of a maternity home. A new garage for 10 motors is to be erected from the borough surveyor's plans at a cost of £3,800. Mr. E. W. G. Richards, architect, is preparing plans for a public library.

BIRKENHEAD.—Workshops and stores are to be erected at a cost of £3,000 for the gas department at the Borough Road depot.—The Corporation are seeking a loan of £87,000 for the erection of 193 houses and a loan of £14,219 for street and sewer works in connection therewith.—About 12 acres of land at the Dell, Rock Ferry, are to be purchased for £7,570 for housing and other municipal purposes.—The Estates Committee have agreed to subsidise 24 houses to be erected at Bidston Avenue by Messrs. T. Wainright and Sons.—Amended plans in connection with the St. Peter's School scheme have been forwarded to the Board of Education.—Subsidy grants totalling £9,525 are proposed for houses to be erected by the Dawson Birkenhead Houses, Ltd., who are developing land in the vicinity of Price Street. Plans passed: 124 houses adjoining Wirral Railway, 24 houses Bidston Avenue, alterations and additions to the Bluebell Inn, Park Street.

Old London Signs.

Charles G. Harper.

BUTTON'S COFFEE HOUSE LETTER BOX.



ELEPHANT AND CASTLE BELLE SAUVAGE YARD.

GUY EARL OF WARWICK, WARWICK LANE.

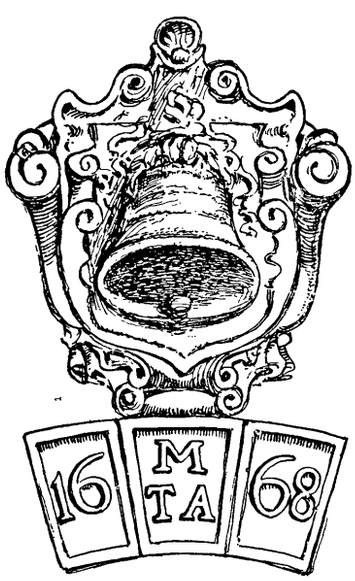
One by one—except when rebuilding rages more furiously than usual, when they go in batches—the old sculptured stone signs of London are being consigned to the museums, and their accustomed places know them no more. They are to be found mostly in the City, those old signs, and they are chiefly those of former businesses and property owners; but others are to be found a little farther afield. Generally they are of the seventeenth century, for the Great Fire of 1666, naturally enough, swept away the earlier.

THE NAKED BOY AT THE CORNER OF GILTSPUR STREET AND COCK LANE.

This allusion brings us, at once, naturally enough, to the little wonder figure of the Naked Boy, so painted and repainted that he looks like stone, which yet stands with folded arms on his bracket, affixed to the wall of a house, once the "Fortune of War" public house, at the corner of Giltspur Street and Cock Lane. The building was taken down and re-erected some years since, but the Boy was replaced. He is the famous "Boy of Pie Corner;" set up soon after the Great Fire, to mark where it ended, for the fire was popularly said to have "begun at Pudding Lane and ended at Pie Corner." This was substantially correct, as regards the march of the fire from east to west; but not as to its duration, for the conflagration still raged in Cripplegate nearly two days later, but the fervid exhortation to repentence by a Nonconformist preacher on the first anniversary of the disaster merely reflects one of the rabid passions of that age. He declared the fire could not have been occasioned by the sin of blasphemy, for in that case it would have begun in Billingsgate, nor lewdness, for then Drury Lane would first have been on fire; nor lying, for then the flames would have spread from Westminster Hall, where the law courts were situated. "No, my beloved, it was occasioned by the sin of Gluttony, for it began at Pudding Lane and ended at Pie Corner!"

The Boy, when originally set up, bore on breast and arms the statement of those places of origin and end of the fire, but the inscription has long vanished, as also have the wings with which the Boy once was provided.

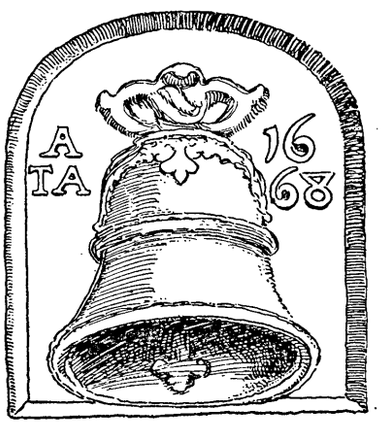
One of the most elaborate of these sculptured signs, long since removed to the Guildhall Museum, is that of the "Bell," which formerly was built into the wall of No. 67 Knightrider Street, over one of the first-floor windows. The house was taken down in 1889. The history of it is unknown. As the date shows, this was one of the earliest of the houses after the Great Fire; and, in common with



THE BELL AT No. 67 KNIGHTRIDER STREET.

all other houses, as distinguished from churches and a few public buildings, it was of brick. The old brick houses of the City did in fact confer great prominence upon the stone tablets inserted upon their walls, by the mere force of contrast. This bell was, no doubt, an inn; one of the many "Bell" inns round about and in the City, of which that on Ludgate Hill survived until the close of the coaching age. This ancient hostelry, whose site is marked by "Belle Sauvage Yard," wherein Messrs. Cassell carry on

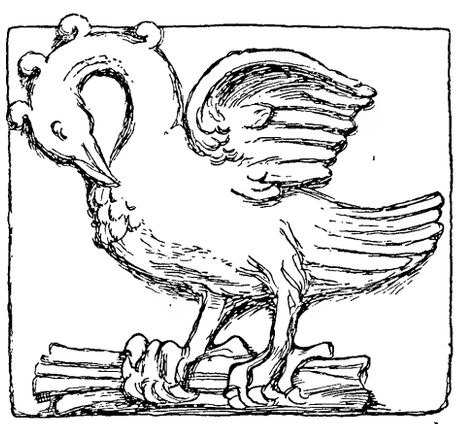
their great publishing business, is mentioned so long ago as the time of Henry the Sixth. It was then described in a legal document as " Savage's Inn," *alias* the " Bell on the Hoop " ; so it is obvious that, even so far back as early in the fifteenth century, the inn bore the name of the landlord, more prominently than the sign, which was far older. " The Bell, Savage," or " Savage's Inn," early became the source of doubts and then of ingenious theories and legends from which emerged the pretty, but wholly imaginary, story of the beautiful savage maiden; that pleasing fiction which Messrs. Cassell adopted, in a fine design for the cognizance of their house, many years ago. Even in the time of Stow, in the sixteenth century, the " Belle Sauvage " story was in process of evolution; and it has had so long a run, and has received so popular an imprimature, that no one now ever will succeed in dispelling it.



OLD BELL INN, HOLBORN.

The Old Bell Inn, Holborn, which stood until 1896 on part of the site of the modern block of buildings partly occupied by Gamage's, had a sculptured " Bell " sign, dated 1668. That date is so frequent that it suggests a furious activity, not only in rebuilding the City, but also all around it. It was that of a charmingly-proportioned moulded little tablet formerly on the wall of No. 12, Walbrook, which indeed bore no inscription other than the date. Bow Churchyard, a quiet court not in the least resembling a churchyard, and lined on its two sides with lofty warehouses, is not the quaint corner it was until about 1890. Until then, some of the oldest businesses in the City were there. On the front of No. 10 was a plain tablet with a projecting object like a ball. The date was 1669. This was intended to represent a pill, and originally was gilded. It was the sign of Messrs. Sutton & Co., makers and vendors of patent medicines, of which, perhaps, the most famous was " Daffey's Elixir." The establishment, however, at the period when this sign was new advertised its wares as to be had here, at the " Maiden's Head."

" At the Maidenhead, behind Bow Church in Cheapside, is sold for Two shillings the Bottle, that admirable Cordial, Daffey's Elixir Salutis. It has been in great Use these 50 years."



PELICAN IN HER PIETY, No. 70 ALDERMANBURY.

A spirited sculpture of that favourite ancient theme, the " Pelican in her Piety," adorns the front of No. 70, Aldermanbury. The reason of this device being here is that it was the family crest of two brothers Chandler, haberdashers, who carried on business at this address in the second half of the seventeenth century. It is typical of old London city life that they lie not a stone's throw from where they spent their days in business and their lives in residence. In the adjacent church of St. Mary, Aldermanbury, you may see the epitaph of them, John and Richard Chandler, who died in 1686 and 1691, aged respectively sixty-nine and eighty-five. The same Pelican adorns the monument of the two brothers, who are represented in elaborately-rigged portrait-busts. They were, it seems, excellent parishioners; and the good Richard Chandler presented the font in 1675.

The religious character of the Pelican and her Piety device is due to the ancient strange belief that the pelican fed her young with her own blood, by piercing her breast with her beak. Hence, by a not unusual mediæval process of mind, the bird—on this entirely erroneous incident in natural history—came to typify Christ and His sacrifice.

This popular belief as to the maternal practices of the pelican was scouted as " a vulgar error " even in those times, such as the seventeenth century, when this device was still a favourite one. The fancy was so beloved that it was not easily relinquished, even though Eugenias Philalethes wrote and printed: " It is a vulgar error that the pelican turneth her beak against her breast and therewith pierceth it till the blood gush out; wherewith she nourisheth her young; whereas a pelican hath a beak broad and flat, much like the slice of apothecaries and chyrurgeons wherewith they spread their plasters, no way fit to pierce."

A fine Ostrich sign which was until 1866 on a house in Bread Street, and is now in the Guildhall Museum, was by chance found many years after it was supposed to have been destroyed. The Chained Swan tablet, still on the frontage of No. 37, Cheapside, at the corner of Friday Street, appears to be ducally collared, as in the well-known Bohun crest. This old dark red-brick house was built immediately after the Great Fire, probably in 1667, and shares with the similar old houses in Godliman Street and Knightrider Street, still standing, the reputation of being the oldest houses in the City of London. But the plate affixed of late years to the frontage by the City Corporation suggests that the building was saved from the Fire.

Among those signs congregated now in the Guildhall Museum, that of the " Three Kings " is an elaborate specimen, though not so admirable as elaborate. It came from No. 7, Bucklersbury. A " Three Crowns " sign stands close beside it. It came from Lambeth Hill, Upper Thames Street. Both are dated 1667.

Although the Three Kings are seen to be very ill-favoured monarchs, their uncouth appearance was not so intended by the sculptor; for they represent the three Magi Kings, and it is therefore a semi-religious sign. The sculptor simply could not do any better than he has done; to make them resemble three weak-kneed supers in a pantomime. Owing to the legendary story of the visit of the kings based on St. Matthew (the number of them not stated) to the cradle of the infant Saviour at Bethlehem, they were adopted as the patrons of travellers. Legendarily, they were the three kings Melchior, Gaspar and Balthazar. The Venerable Bede describes their personal appearance as particularly as a police-notice of " wanted " persons would do. That is a singular feat of Bede's, but it does help us to look upon his historical works with some doubt. But Bede was outdone by later elaborators of the legend, who declare the Three Kings were slain in Arabia, A.D. 70. Further than that, in the fourth century, their bones (or some bones) were discovered by the Empress Helena, who removed them to Constantinople. Later they were in the church of San Eustorgio at Milan. When the Emperor Frederick Barbarossa—otherwise " Redbeard "—in 1162 captured Milan, he removed the relics and gave them to

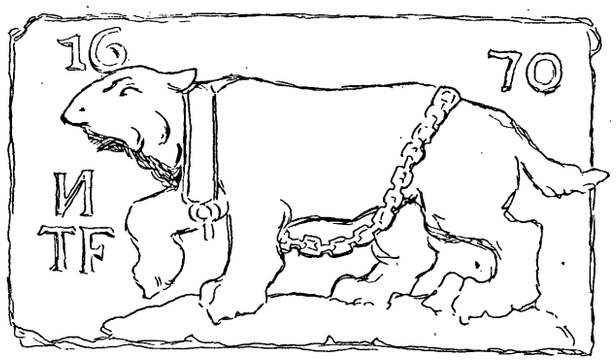
SPREAD EAGLE.

the City of Cologne. Hence they often are referred to as the "Three Kings of Cologne." And there they are now, and Cologne bears their figures on its coat-of-arms.

The "Spread Eagle," or eagle with two necks, illustrated here, is an old City sign of which only some speculative theories may be had. It is in the Guildhall Museum, and was presented with the sign of the Ostrich, having been purchased by the donor from a person in whose family both for many years had been, and who did not know their story. The "Eagle" sign bears the initials "R.M," and the date 1669. An attempt to associate it with the business of Milton's father, at the "Spread Eagle," Bread Street, will not do, either by the initials, or the date.

A very good "Half Moon" sign is in the wall of the Half Moon Inn Yard, in Southwark High Street, with the initials "T.T.E.," and the date 1690, and a well-executed device in Serjeants' Inn, Fleet Street, exhibits the badge of that extinct society, the two crossed "garbs" or as plain persons who are not heralds, would say, "wheatsheaver."

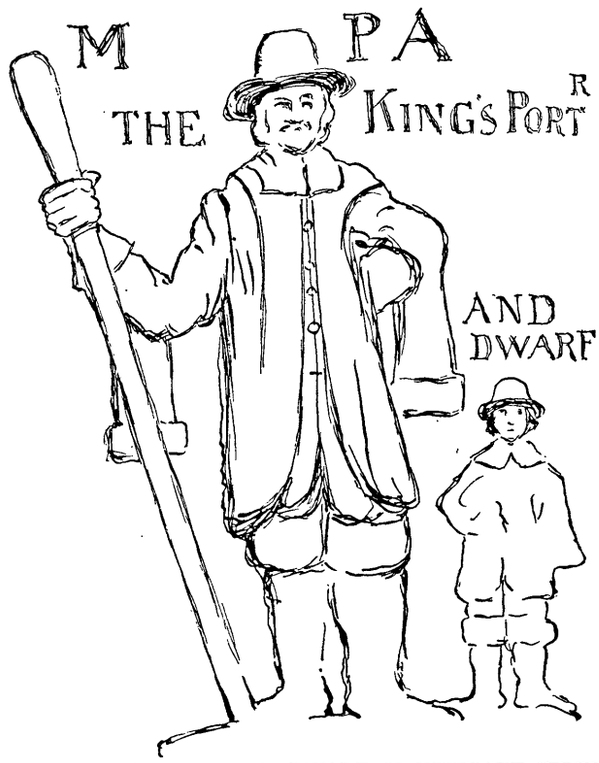
One of the very finest of the old City sculptured stone signs still remaining outside the Museum is that on the wall of 17½, Addle Street, in the Ward of Cripplegate. When, some twenty-three years ago, the old premises were taken down and rebuilt this stone was carefully preserved and reinstated in the new building. Had this generally been done, how rich would the City yet be in these curious and interesting relics! This is a very good bear, thought too aquiline about the muzzle, but an artistic production. Nothing seems to be known of its history. Hard by, in Philip Lane, there was a very spirited sculpture of the



THE BEAR IN ADDLE STREET.

same date, representing a monkey gnawing an apple; but it has disappeared.

When No. 47, Cheapside was rebuilt in 1882, a sculptured Bear sign was discovered in the foundations of the former building. It has no identifying initials, but has been thought a relic of the "White Bear," a mercer's shop kept by Robert Hicks, of Soper's Lane (now Queen Street), father of Sir Baptist Hicks. The son was born at the shop, the sign of the "White Bear," in 1551, and he still carried on the business after he had received his knighthood. A choice has, however, to be made between the "White Bear" sign and that of the "Brown Bear," a shop on the opposite side of the way, next Mercers' Hall. The sign unearthed at the digging of the foundations for No. 47, Cheapside, Messrs. Cow, Hill & Co.'s new premises, in 1882, has been built into the wall of the shop. The firm is now that of Messrs. P. B. Cow & Co. The building is, architecturally, a notable one, for it is one of those characteristic Ernest George and Peto designs of which we think, the City shows only this example. It is in their well-remembered Flemish Renaissance type, in red brick, with corbie-stepped gables, and to-day represents a lost cause, a forgotten ideal in the City, of which we may take Norman Shaw's earlier by some eight or ten years, "New Zealand Chamber" in Leadenhall Street as the first manifestation; as perhaps Halsey Ricardo's plate of officer in Great Swan Alley, Moorgate Street, was the intermediate expression; while Collcutt's bank building on Ludgate Hill, at the corner of St. Martin's Court, was the last. No more red brick in the City; no more Elizabethan, Flemish, or Eclectic Renaissance in red brick and terra-cotta. Only the stone buildings of Brobdignag, and the now architecturally popular garrya-lush giving motive of decoration, for ever and ever!



THE KING'S PORTER AND DWARF IN NEWGATE STREET

The very quaint sculptured sign representing the two figures of Charles the First's giant porter, William Evans, and the dwarf, Jeffery Hudson. The dwarf was, at nine years of age, scarce eighteen inches high. He was, however, well-proportioned. He came from Oakham, where he was born in 1619. The tablet, formerly over the entrance to Bull's Head Court, Newgate Street, is often stated to have "disappeared." It has—in a sense—for it is obscured; but it exists behind the letters "Co." in the gilt-letter sign of Hanlon & Co., No. 78, Newgate Street, between the first and second floors.

The giant porter measured seven feet, six inches. He came from Monmouth. At a Court entertainment he caused great astonishment by taking the dwarf out of his pocket. The little man came into the service of the King by way of the Duchess of Buckingham, at whose table he was brought in a pie, from which he emerged, to the delight of the Queen. After many adventures—among them the surprising one of being a "Captain of Horse" in the Civil War; he died in 1682. It is a pity that the interesting tablet is not to be seen.

The "Leopard" sign in Bridge Row has no recorded history, nor has the rampant lion sign with the City shield now in the Guildhall Museum. The like is to be said of the "Anchor" sign, dated 1669. The "Leopard" is all unsuspected by the wayfarer, because, at the rebuilding of

the premises, No. 28 Bridge Row, the tablet was built into the wall of the passage, just within the entrance, where it yet is.

THE LITTLE MIDSHIPMAN IN THE MINORIES.

The famous "Little Midshipman" sign is old but not ancient, and it is of wood. It has, perhaps, been written about far more than any other sign, for it is a Dickensian item: the sign of Uncle Sol.'s nautical store, in "Dombey and Son." Solomon Gills was fond of his Little Midshipman, who is elaborately referred to many times in the story, as indifferently braving all weathers, over the shop-door, in his cocked hat and knee-breeches, the uniform of the midshipmen and officers of the Navy in Nelson's time. His is represented in the act of taking an observation with what Dickens calls a "quadrant." Actually, he was at the time when the novelist wrote, on a bracket in front of one of the first-floor windows of J. W. Norie's "Naval Academy" in Leadenhall Street. The business afterwards was removed to No. 156 Minories, to what is now Messrs. Norie & Wilson, where the little modern effigy is carefully preserved within, lest some enthusiastic collector of Dickens' relics should annex it. The figure once made a journey to Chelsea, for it was shown there in the Naval Exhibition of 1891.

Another, and a much older, carved wooden trade sign, almost equally famous, is that of the celebrated "Cock" Tavern, which stood until 1887 in Apollo Court, Fleet Street, opposite the Temple Bar Memorial branch of the Bank of England, styled with unconscious cynicism the "Law Courts" branch, regardless of the fact that, officially, great buildings are not "Law Courts," but the "Royal Palace of Justice," stands on the site of the "Cock" Tavern.

The most outstanding literary association with the "Cock" is that with Tennyson, in his "Will Waterproof: a Dramatic Monologue," in which the poet calls upon the

> "Plump head-waiter of the 'Cock'
> To which I most resort;
> What is the time? "Sir, five o'clock
> Go fetch a pint of port'"

The plump, but haughty, head-waiter of that time was reported to have declared on his attention being drawn to the poem, that he did not know the gentleman; he was not one of their regular customers. But the chief customers of the old tavern were barristers from the Temple opposite, and their clients, and City men of business, and not poets, and not even journalists; for it was a house rather on the expensive scale. In olden times the sign was the "Cock and Bottle," as appeared by an advertisement of a quaint character which was issued with "The Intelligence," No. 45, July 1, 1666:—"This is to certify that the master of the Cock and Bottle, commonly called the Cock and Bottle alehouse, at Temple Bar, hath dismissed his servants and shut up his house for the Long Vacation, intending (God willing) to return at Michaelmas next: so that all persons whatsoever who have Accounts with the said Master, or Farthings belonging to the said house, are desired to repair before the 8th of this instant July, and shall receive satisfaction."

When the old house was demolished, the then proprietor, Mr. George Colnett, removed to No. 22 Fleet Street, opposite where the sign of the "Cock" remains to this day. With him he took most of the fittings from the old house, including the old-fashioned wooden partitions between the tables, and the Jacobean stone fireplace, with carved oak overmantel. One of the "Farthings" referred to in the advertisements of 1666 is shown to visitors. It is one of the many "tokens" anciently passing as money between tradesfolk and customers.

The actual carved wooden sign of the Cock, by, or attributed to Grinling Gibbons—a fine piece of work—is preserved within, on the first floor, where will be found the other relics already referred to. The brightly-gilded Cock displayed outside is a replica.

In our own time the once familiar display in the chemists' windows of the great coloured bottles, red and green and blue, has almost wholly disappeared. The chemists' shops at night were brilliant with those displays; but now they are the exception, and the reference by Tennyson in *Maud* to the typical chemists of the "50's" of the nineteenth century who vended adulterated drugs will some day need an editorial explanation. The line referred to the chemist who "Pestles a poisoned poison behind his coloured lights."

In the same way, the doctors have ceased to exhibit their red lamps, which the malicious used to say were danger-signals. No doubt in the poorer and therefore the more conservative quarters of London you still may find the medical man's red lamp, as well as the chemist's coloured bottles; but they are the exception to-day. Of course, the still older chemist's sign, the pestle-and-mortar, is wholly a thing of the past. But the barber's striped red and white and blue pole is still to be seen in back streets, even though the former accompaniment of it, the pendant brass dish, long since went the way of the obsolete. The dish had a semi-circular notch in the rim, for it represented the actual dish which was used ages ago, when the barbers were "barber-surgeons," and continued to "let blood" in those times when to be "bled" was a remedy for a too full-blooded habit. The patient held the dish to his neck. The only barbers who now let blood are the awkward men who accidentally cut their customers when shaving.

THE COCK AT THE COCK TAVERN.

Among the Alps of Dauphiné.

2.—Picturesque Villages around Grenoble.

By H. A. J. Lamb, A.R.I.B.A.

A TYPICAL FARM ON THE OUTSKIRTS OF GRENOBLE.

Grenoble makes an ideal centre for the visiting of the many picturesque villages situated among the mountains in this part of France.

The majority of people who visit Grenoble, and I believe twenty thousand French tourists visit the town each year, do so on account of its convenience as a starting point for the numerous mountain climbing expeditions that can be made to the various ranges within easy distance. By means of motor charabancs or trams, which start from the centre of the town, most of the villages can very easily be reached. The trams, which are quite a feature of Grenoble, develop into powerful mountain trains, it seems, since they extend some 12 to 15 miles into the foothills around Grenoble, and thus are of considerable benefit to the farms and other industries, for the bringing of fruit, or produce, and other materials from the outlying villages.

ROMANESQUE CHAPEL ON THE HILL ABOVE VIZILLES.

The roads for the most part are surprisingly good, many of the main roads being coated with tar. They are also wonderfully engineered in the more mountainous districts, and in many cases tunnels are cut clean through the rock, the longer ones being perpetually lit by electricity. Buildings in the country typify the wildness of their surroundings. Many of the houses are roughly built of stone with thatched roofs and gables stepped with stone slates, quite a feature of the Dauphiné.

There are several very fine châteaux in the district. At Sassenage will be found a moated château of the seventeenth century, built when the eleventh century château on a hill above was abandoned. The interior contains much of interest in the way of furniture, pictures and armour, etc. Above the main entrance is an allegorical carving representing the fairy Mélusine, who according to the French legend married a knight named Raymond, on condition that occasionally she should be left alone; this request was subsequently refused, so that she transformed herself into a winged serpent, and is supposed to inhabit in spirit some caves nearby, and only appears on the death of any inmates of the castle. In the village is a church with Romanesque belfry, somewhat spoilt in effect by an immense clock. In a side chapel is the tomb of Lesdigiuères, who lived in the sixteenth century and was known as "the old fox of Dauphiny."

At Vizilles is a very fine château magnificently situated, built in 1610, enlarged in the eighteenth century and restored in the nineteenth century. It was in this castle that a meeting was arranged in 1788 among the various states of Dauphiné, which became a prelude to the French Revolution. Over the main entrance, just visible in photograph, is an equestrian statue of Lesdigiuères.

Vizilles, named by the Romans Vigilia, was an important station in those times, since it lay on the road between Italy and Vienne.

On a hill above the town is a very fine little Romanesque chapel, particularly pure in style and according to tradition connected with the Templars.

In many of the villages the manufacture of cement is actively carried out. There beauty is therefore marred by the clouds of dust which overhang them, and by the factory chimneys which belch forth dense clouds of smoke. This is particularly so at Vif, a few miles to the south west of Vizilles. The church built in the twelfth century has an early Romanesque porch and choir, but was subsequently remodelled in 1680, the stained glass windows being by Debelle, a Grenoble painter.

At Domène, 6 miles from Grenoble, are some interesting ruins of an eleventh century priory church, consisting of a nave and three apsidal chapels originally built of rough stone walling with brick piers and vaulting; it is now roofless and in a sad state of decay; adjoining is a thirteenth century chapel, also in ruins and exposed to the weather; on the walls can just be discerned roughly executed frescoes,

At Villard Bonnot, a small village about three miles further on, will be found an interesting circular church with a striking interior.

I was unable to determine the age of the building, but parts of it probably date from about the eleventh century. Since then it has been considerably restored, possibly when the tower was added in the sixteenth or seventeenth century. Lit entirely from the cupola, and with the walls and pilasters brightly coloured, it presents an effect much

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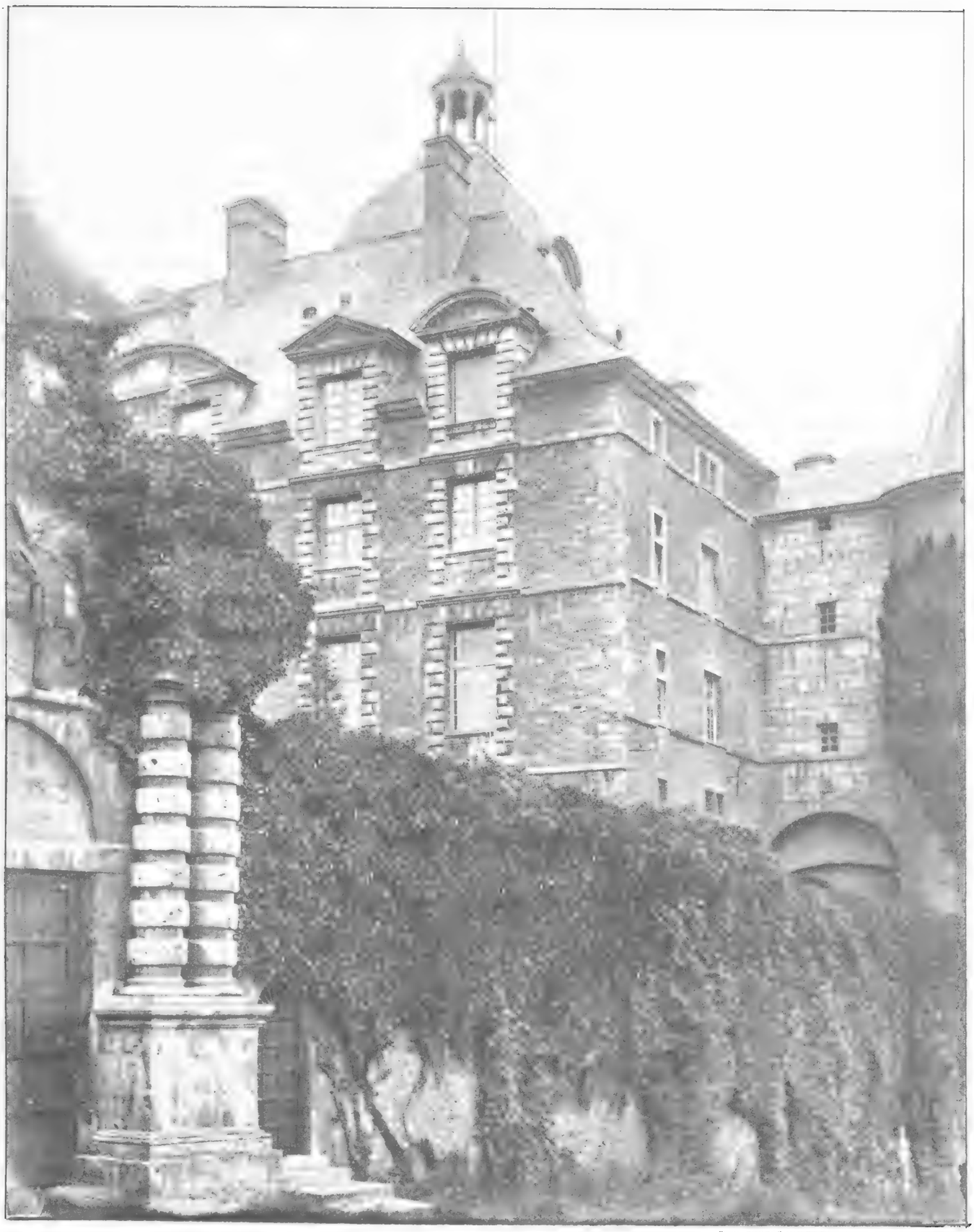
PICTURESQUE VILLAGES AROUND GRENOBLE.

VII. A VIEW OF THE MAIN STREET SHOWING EARLY ROMANESQUE CHURCH TOWER.



"INK-PHOTO" WM BROWN & CO. LTD. LONDON, E.C.3.

VIEW OF A CHATEAU AT VIZILLE. BUILT 1610.

"INK-PHOTO" WM BROWN & CO. LTD LONDON, E.C.3

WEST ENTRANCE TO CIRCULAR CHURCH AT VILLARD BONNOT.

BUND GRENOBLE.

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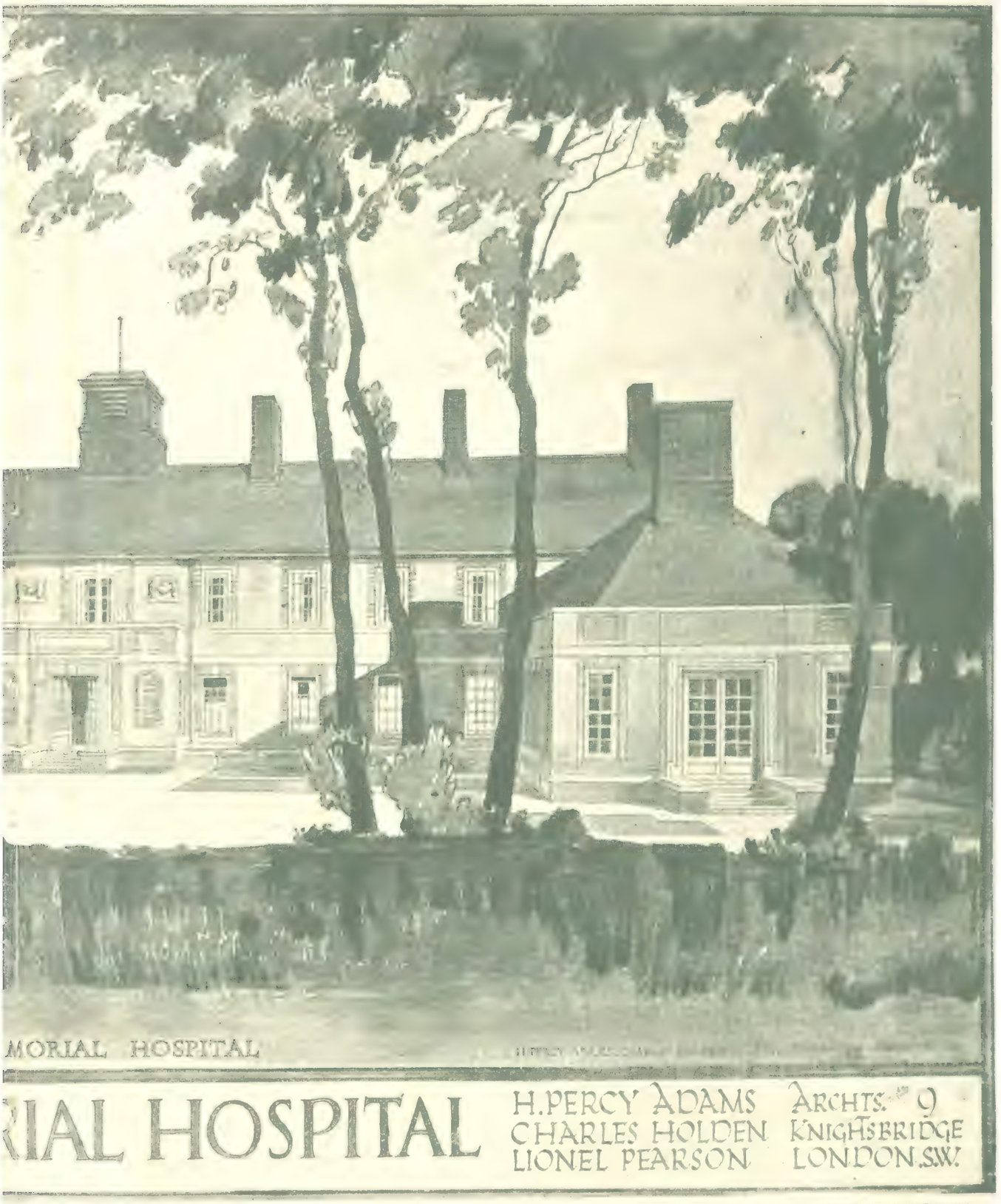
H. PERCY ADAMS, CHARLES HOLDE



RIAL HOSPITAL

H. PERCY ADAMS
CHARLES HOLDEN
LIONEL PEARSON

ARCHTS. 9
KNIGHTSBRIDGE
LONDON S.W.

"INK-PHOTO" WM BROWN & CO. LTD LONDON, E.C 2.

: WAR MEMORIAL HOSPITAL.

EN AND LIONEL PEARSON, ARCHITECTS.

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PICTURESQUE VILLAGES AROUND GRENOBLE.

A 17TH CENTURY CHATEAU AT SASSENAGE.

THE ROMANESQUE CHURCH AT LE GRAVE.

less crude than is usually to be met with in French churches. To the right and left of the altar, which is of white marble, are paintings, that on the left representing the Ascension can be seen in the photograph. A nice effect has been gained by the panelling and altar rails which are of walnut. A very interesting excursion can be made from Grenoble by motor bus to Lé Grave, which lies at the foot of the most important mountain range of Dauphiné. Towering above the village rises the snow capped Meije (13,000 feet) Lé Grave, a typical mountain village with roughly built houses roofed with stone slates, the chimney stacks in most cases being terminated with a slate laid flat and held in position by stones to keep out the snow. With a background of snow covered mountains, and bright blue sky the church, Romanesque in style, stands out boldly. Roughly moulded caps complete the piers which carry the vaulting, the effect of which is entirely spoilt by being painted grey with white joints in imitation of stone work, one supposes. Whilst here, it is well worth continuing the journey to the Col du Lauteret, where one can get a magnificent view of the mountain ranges. The lower slopes are at this time of the year a beautiful sight, being covered with wild narcissi, forget-me-nots, anenomies, pansies, violets, etc. It was in this district that Capt. Scott came to test his motor sledges, before making his journey to the Antarctic, from which he never returned. For several places mentioned in this article, see our inset plates.

VIEW OF THE INTERIOR OF THE CIRCULAR CHURCH AT VILLARD BONNOT.

(To be concluded.)

The final section deals with the Monastery of the Chartreuse and Pont en Royans.

Correspondence

[*The Editor will not be responsible for the opinions expressed by Correspondents.*]

"Concrete."

To the Editor of THE ARCHITECT.

DEAR SIR,—Although I make no pretence to be an authority on architecture, I was much interested in the correspondence which appeared in your journal last week dealing with "Architectural Education" and "Concrete."

As one who has travelled considerably and seen much that has been accomplished in other countries, I would like to agree with "Student" that we seem to be rather slow in adopting new styles of building. I recognise, of course, that in our great cities, London particularly, there have in recent years been put up some imposing and dignified edifices; but speaking generally, as a layman anxious for the beautifying of our towns, I do not think it can honestly be claimed there is as much originality of invention as, for instance, there is in the United States.

We are all deeply concerned about the shortage of houses. Although the problem is a serious one it may be a blessing in disguise, because it can provide the opportunity for young and enterprising architects to seek new designs for artisans' dwellings and to put a check on the long rows of monotonous, drab houses which are the characteristic of so many of our industrial areas and which must have a depressing effect on the minds of those who have to live in them.

This brings me to the question of the utilisation of concrete. I dare say that in the past there have been erected in this country ugly and unsatisfactory buildings. But I have journeyed extensively in all parts of the United States, and one of the things which impressed me greatly was the manner in which concrete is most artistically used on the other side of the Atlantic. Concrete need not be grey, but can be of various soft and attractive tints, such as can be found in the houses recently built in Liverpool.

As for durability, if concrete is properly made it should last as long as granite itself.

At the moment, however, we are thinking not so much of loveliness in architecture as we are of the speedy provision of houses. I am sure there is no antagonism to bricklayers, but if all the skilled bricklayers in the country were kept in constant employment for fifteen years it is probable that at the end of that period we would still have a grave shortage in houses. Once we have got rid of our prejudices against concrete there is no reason why the present lack of houses should not be met within the next three or four years, because the buildings could be erected within the space of a few weeks and, under proper supervision of course, chiefly by the use of unskilled labour. No one who has travelled in America and has seen what has been accomplished over there can argue that useful and beautiful houses cannot be provided through the agency of concrete.

I am,

Yours very truly,

JOHN FOSTER FRASER.

11 Chelsea Embankment,
London, S.W.3.

NORTH WALES.—A scheme is being prepared for a Hospital for the Mentally Deficient of the North Wales Counties.

Architectural Education.

In the main, the opinions set forth below are at decided variance with those expressed in these very columns a month ago. It is therefore right to state that, with his usual fairness, the Editor has sought the views held by believers in the school system now prevailing. Hence these lines which, it may be added, bear far more on the teaching that has brought fame to the A.A. than of any other school. Upon others, the writer, for the purpose of this article, is not competent to express any opinion, though it is true of all schools in Great Britain, that they do practise a system more or less leavened by uniform convictions.

Nowadays, the training of architects should lead to a simple but cardinal condition: the efficient relationship between the modern world and the practitioners of architecture. It should therefore proceed from a set of premises themselves steeped in the heterogeneous making of this modern world.

Now, the modern world is an extraordinarily diffuse and ever-changing amalgam of activities, the several aspects of which owe their being to the advent of machinery. Upon many, to be sure, this phenomenon jars as it jarred years ago on the quaint complex of William Morris. A few dislike it; many mistrust its autocratic power, but none can deny its existence or the probability that it has come to stay. Then why not make the best of it and turn its exacting demands into works of living art? As a matter of fact, the great majority now believe it to be an excellent phenomenon and one already giving proofs that a new kind of beauty and vitality will arise from its clashing deployment. We have no coherent idea as to what it will lead to, but there is little doubt of a future and striking magnificence. One thing is certain. It will be brought about by the continuance of the struggle for technical mastery so characteristic of our epoch. In every human activity this struggle is taking place, a valid enough statement if we bear in mind that ever since the advent of machinery, industry and commerce have taken such a new lease of life that their actual state carries hardly any resemblance to that of the eighteenth century, and therefore other human activities dependent on these two basic ones have also changed in a like ratio, and presumably will go on doing so. To take but two instances, let us examine—I choose at random—the development of the hotel and of the shop.

Both were known in antiquity, yet what resemblance is there between the *hospitium*, the *coenacula cum pergulis* of second-century Rome and the Adelphi Hotel at Liverpool? between the little *taberna* stretching the ten feet of its window space upon the street of Ostia and Selfridge's? Even during our own early Georgian period, the shops and hotels of England were nearer to their prototypes of pagan Rome than to their successors of 1924. This immense difference is due to the revolution created by the coming of machinery. But machinery is only in its infancy. Industry and commerce are, therefore, also very much in an evolutionary stage, and as the progress of any activity depends on the progress of all the others, architecture is obviously in the same position of watchful animation as industry, commerce and the rest of them. As they develop, so does architecture follow. It can readily be seen how the training of an architect must be based on the demands of a living architecture, and the world being what it is, its requirements call for an efficiency and qualities less and less lackadaisical.

Hence the necessity has now arisen for architectural education to adapt itself to the task in hand, and to that end the governing bodies of our architectural schools have evolved, with infinite care, thought and skill, the system of teaching now in vogue. The consequences resting on the choice of any policy are of a serious and far-reaching nature: no mere petulant enthusiasm was allowed to dictate its formulation. The whole fabric was reconsidered. The abuses, delinquencies and aberrations for which architecture will be chiefly known in its passage through the last 100 years pointed to a debility in the body architectural far too chronic to be the sign of some transient malady. There must be some deeper cause, and a shrewd mind bent upon its search soon discovered that it resided in the disparity cleaving a chasm between a transformed, pushful world on the one hand, and, on the other, an architecture as shy, ill-equipped and parochial as a Victorian maid brought up in some country vicarage.

The evil was of two kinds: technical ignorance and abrased sensitiveness. Both are being attended to now and if, to some fretful and anxious souls, the manner of treatment seems too radical and even wrong, no one will mock them; the treatment is undoubtedly a strong departure from the old pupilage and picking-knowledge-up-at-random system. Yet, go into the diagnosis and the logical character of the remedy will sooner or later strike you as sound. It may not be perfect, but it is sound. Compared to the second kind of evil, the first is easy to state. If we go back to our leanest period, it becomes obvious how, in the presence of new types of buildings and new modes of construction, nineteenth century architects felt ill at ease, nay, at a loss. Let us be candid and admit their inability to design in the light of totally new conditions. They could not design a hospital, a bank, or a hotel, still less a factory or a station, without blunders in planning, without desperately clinging to precedents. A pathetic feature lies in the fact that in many cases there were, of course, no precedents. Machinery, during these years—lulling to architects but intensely busy to the remaining creative community—had *forced* the evolution of new types, and a keen, able captain of industry very quickly saw the possibilities it brought. He clamoured for larger, higher, and often, more complicated buildings; yet he wanted them—and properly so—economical to build and economical to run. What could architects do but try? They did. It was costly. Experiments are costly and so are blunders. The former are the penalty progress is willing to pay; the latter, the penalty ignorance entails. The first is inevitable; the second can be guarded against, and it is to the advantage of industrial and commercial patrons to commission architects versed in the intricacies of up-to-date planning and of new materials.

Here then was the first task: to teach modern planning and modern construction. At that time, the only way to do it was to assimilate and adapt the one sound method available: the French manner of architectural development. A good deal of adverse criticism has been levelled against this system, some of which is indeed to the point, but it should be remembered that our schools have by now a strength of their own and do not depend nearly so much on the Beaux-Arts as formerly, if at all. The excesses in matters of planning and mass-distribution which the love of formal symmetry at all costs, of axial lines, of grandiose lay-outs led to, in U.S.A. as much as in France, have been a warning, and our geographical position, therefore our more detached judgment, have enabled us, British, to study the work of other polities. Much, for instance, is now being assimilated from northern races. I am aware of how some critics look upon this development, how they would like to see it brushed aside for more concentration on our "traditional" methods, but again I am convinced that the schools are profoundly right. To put it bluntly, there is no getting away from the permanency of cosmopolitan interactions. The demands of commerce and industry—upon which all the rest pivots—are very much alike the world over. The Americans, the Germans, the Dutch, the Swedes, have a winsome, energetic way of ringing substantial changes on certain old tunes, and when needs be, of creating new airs, it would be unwise to shut out of our understanding. They involve, in architectural terms, important questions of planning and of construction. On that, in all likelihood, much of the future worth of our art depends. It has been pointed out in former articles in this journal how unlikely are the chances of England needing buildings the size of those seen in the U.S.A. We do not know for certain, but the evidence, so far, is all in favour of our needing buildings almost as large, almost as sumptuous. After all, industry and commerce, the world over, are going through a process of amalgamation and their expanding power will

call for an architecture in accordance with it. It has further been said that in the domestic sphere we should stick to our traditional methods, but such methods, very admirable indeed before and—I hasten to add, still admirable for adaptation in specific cases now—are not enough to meet the whole case of domestic architecture. Surely flats, communal centres, belong to this category, and it is safe to suggest that in towns, at any rate, they will assume an expression which our traditional forms would be inadequate to express. The wonderful charm of the old work lies in the compassing of features on a small scale and in texture. New textures are at hand, however, and as to scale, let us bear in mind what Rochefoucauld wrote:

> "Ceux qui s'appliquent trop aux petits choses deviennent ordinairement incapables des grandes."

No, the schools take a long view in the matter of planning and construction. They also take a wise one when they try to remedy the second evil of the nineteenth century, to wit, an abrased sensitiveness in expression. The whole of this country has been disfigured by the pseudo-Jacobean or Gothic erections of that time, many put up regardless of the purpose for which each building was intended. It is absurd to talk of traditional methods where large stores and hospitals, railway, power and fire brigade stations, every appliance of which is intensely modern, are involved.

So that to train the sensitiveness and æsthetic gifts of the young architect entirely by way of measuring and sketching is to risk a retrograde and misguided system. By all means fill the student with a composed admiration of the past, but keep his eyes, most of the time, on the present and the future.

No more skilful instance of results based on such a policy could be urged than the Town Hall of Stockholm. Large in scale, it is a moving, beautiful blending of old and new. The appeal and value of its modern expression is nevertheless based on the lasting beauty of former shapes and details. And no one in his senses could compare the Gothenburg Exhibition to Wembley. The former, barely a third of Wembley's area, has an architectural value which, if one yields to the appetite for comparisons, should give us furiously to think. It is, of course, sad to admit our partial inferiority, but it is far better to swallow the humiliation and mend our ways than to go on asserting our pastiches to be genuine creations. And it is because the schools are out to break us of our former happy-go-lucky habits, because they believe in real knowledge, in keeping with the times, that their curricula are mapped out on their present lines. Minor points, such as tendencies in rendering and draughtsmanship are only means to an end, and can be left to mend themselves, as they will. What matters most is the knowledge and skill needed for good planning and the knowledge and sensitiveness without which the facades of our future streets will go on being so many blots on our national escutcheon.

GORDON H. G. HOLT.

We believe the sanguine dreamer alone can convince himself that expansion will take place here on anything like an American scale. The writer has also overlooked the fact that we have emphasised the necessity for the study of planning and its paramount importance. Our whole case is that buildings of the scale and character likely to be needed here may be fittingly and suitably dealt with in accordance with our own national traditions and that in order to do this most successfully a much greater study of what has been produced here in the past is required than is usually given by the student of the schools.—ED.

EASTBOURNE.—Many proposals are being considered, new bowling green at Geldredge Park to cost £1,200. The new road scheme between Brighton and Eastbourne; a branch library at Seaside and also baths at the same place. The scheme for a public washhouse is also being dealt with.

CHELTENHAM.—Swindon Road school buildings to be completed at a cost of £11,400. A further loan of £4,600 for the erection of Practical Instruction school buildings has also been granted.

Fifty Years Hence, 1974.

Last week there appeared an article under the title of "50 Years Hence." On reflection we thought it fair to our readers to inform them that we have special facilities of obtaining these contributions, which will appear from time to time, but so as to bring our readers into closer touch with the conditions prevailing in 1974, our contributor thought fit to send us in summarised form the chief events of the intervening years.

As all the middle aged architects in 1924 had gone out of practice in 1974, it is a much simpler matter to review their work, though sad to say very little of it remains to be seen to-day. Our contributor considers it necessary to inform us of some of the facts concerning general history. He considers this necessary so as to make the architectural position clearer to our readers.

The European situation began to improve in about 1936, after the allies had finally decided that it was no longer any use thinking about reparations, as at this time most of the nations had entirely reduced their armaments, and nobody was in a position or had any desire to use force to support any arguments, everything being decided by peaceful methods of arbitration.

The burden of our payments to the United States was very heavy and our statesmen were seeking to find an honourable means by which taxation could be lightened. Our foreign exports had not greatly improved owing to the poor condition of continental currencies. The last 12 years had been spent in drifting. Everybody hoped for a boom, and hope seemed to die very hard. Strikes followed strikes and unemployment increased instead of lessened. We received no payments of either capital or interest from our allies during the war, and Russia remained in a state of stupid inactivity and stagnation. All thinking individuals realised that our credit depended upon our paying the U.S.A. obligations. If we failed then our sovereign would lose its value, and its purchasing power would be reduced and the almighty dollar would become the credit standard of the world finance. The burden was carried unflinchingly but those who contributed to its necessity did not gain our respect or affection. During those twelve years some expensive lessons had been learnt in connection with financing foreign loans, but perhaps they were necessary, because slowly but surely the conviction was growing in our race that our first duty was to ourselves. Further, that having been able to build up a huge empire by our own efforts, we should be able to maintain our position without outside assistance. This growing spirit was manifesting itself more and more every day. Old political parties were sinking their differences of the past and a new party known as the Moderates was gradually coming to the front. Their policy was based on the slogan "the British Empire for the British." Their speakers had a very easy task when once the tide had turned. The picture of the United States existing as a self-supporting country was easily drawn and described with a big wall of protection all round its territory, whilst wealth was being amassed by them by the export of their surplus products to unprotected countries like our own. The folly of not making the best use of the millions we had invested in the building up of our colonies was realised, and the moderates were returned to power on a policy that included the creation of a big tariff against all United States goods, and a tariff against foreign importations. This change created a panic on the other side. Americans saw themselves unable to sell to the only country who possessed a staple gold standard.

In 1938, we as a nation had plenty of money again, and though we still had a housing problem and some unemployed, conditions generally began to improve; a spirit of joyfulness came over the whole land, which reflected very favourably on the architectural profession. In 1940 the R.I.B.A. decided to drop the matter of registration, after having spent many thousands of pounds in an endeavour to obtain these illusionary benefits, As an immediate result the Society of Architects reorganised themselves as a separate body. In 1960 a unification scheme of much larger extent was proposed and passed, in which not only the Society of Architects and all practising architects, but all general contractors were included, with the result that no members connected with the architectural and building professions were outside the R.I.B.A.

To refer back to 1940. Motor buses still plied for hire, though flying machines were at this time transporting many business men to their offices. With the increased wealth of the country it was realised that London should be to some extent entirely rebuilt, and many freeholds were in consequence acquired in the neighbourhood of St. Paul's, Fleet Street and the Strand, and everything was ruthlessly set back with the result that to-day, in 1974, the City of London possesses the finest street in the world, having a clear vista from old Trafalgar Square to St. Paul's, and on beyond to the Bank of England. Ludgate Circus was completely wiped out, and the old railway bridge of course with it.

Compulsory Town Planning. Should it be Extended?

By John A. Rosevear (Associate Member of the Town Planning Institute),
from the "Journal of the Town Planning Institute."

The need for further town planning at the present juncture appears to the writer to be all-compelling and insistent in view, first, of the large amount of private building now taking place in and around our cities and towns, and, in fact, in all parts of the country; and, second, the new housing schemes about to be commenced by local authorities, with the assistance of the Government, under the present Housing Bill.

Before seeking an answer to the question raised, let us briefly examine the position and powers at present available. Admitting that "compulsory" town planning is necessary—and although the writer is not personally overfond of "compulsion" we must admit that such a power is often desirable, human nature being what it is—where do we stand now:

1. As regarding undeveloped land;
2. In regard to "built-up" areas?

As regards (1) the compulsory preparation of schemes is incumbent upon all Councils of Boroughs or Urban Districts with a population exceeding 20,000 on January 1, 1923, and these schemes have to be submitted to the Ministry of Health within six years—viz., by January 1, 1929. The individual scheme must apply to all undeveloped land as defined in the 1909 Act—viz., "land which is in course of development or appears likely to be used for building purposes" in the area of the local authority, and may with the express consent and approval of the Minister include land in another local authority's area. This undeveloped land is usually upon the outskirts of and surrounding the town.

2. "Built-up" or developed areas, or what we might call the town proper. There is no existing power to town-plan either voluntarily or compulsorily, other than the very limited permission which may be given expressly in certain cases by the Ministry to include in a scheme under (1) "Already built upon land," but only provided that such developed land is *so situate with regard to the undeveloped land* that its inclusion will better secure the general objects of the scheme. This is, however, a very narrow power, and the wording of the clause seems to give little scope to the Ministry of Health.

We can, I think, better appreciate the limitation of the existing powers when we consider the following facts:

(*a*) There are 1,798 local authorities in England and Wales who can "voluntarily" prepare and adopt town planning schemes, their areas totalling to 37½ million acres.

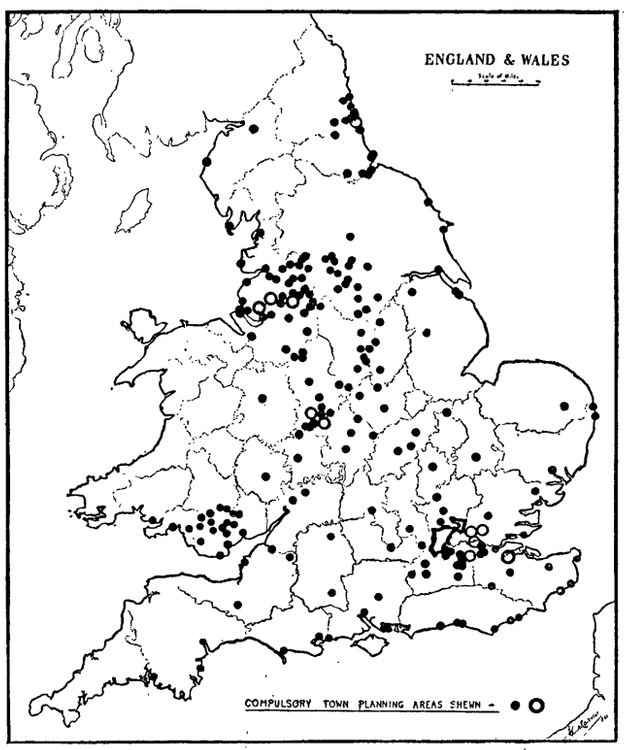
(*b*) The "compulsory" provisions apply to only 249 local authorities with a total area of 1⅛ million acres, or a percentage of only 13·8 in numbers and less than 4 per cent. in area.

The attached diagram shows by black dots and circles the disposition of the "compulsory" areas, and very forcibly the vast white spaces, sometimes whole counties, where town planning may be relegated to the limbo of forgotten things. Moreover, the population line fixed at 20,000 seems unfortunate, when it is realised that the following cities and towns—amongst many others—are *below* the limit—viz., the cities of Durham, Chichester, Ripon, Truro and Bangor; towns such as Berwick-upon-Tweed, Whitehaven, Goole and Fleetwood in the north, Grantham, Gainsborough, Leek, Wenlock, Redditch, Malvern, Beeston and Warwick in the Midlands, and Wareham, Slough, Romford, Tonbridge, Ashford, Harrow, Uxbridge, Basingstoke and Epsom in the South. Also such well-known coast towns as Falmouth, Exmouth, Teignmouth, Bognor, Sheerness, Harwich, Clacton, Felixstowe, Redcar, Aberystwyth, Llandudno, and Hoylake, etc. There are also many large urban districts on the outskirts of the Metropolis—e.g., Brentford, Wanstead, etc., and adjoining other cities and towns just under the limit. Surely it cannot be argued that districts such as these do *not* need early town planning or that it can be left in abeyance at the sweet will of the City Fathers or local town councillors.

It will be said there is nothing to prevent such local authorities—outside the 20,000 limit—preparing voluntary schemes, and that the Ministry of Health can enforce and compel dilatory authorities to mend their ways. True, but what are the facts? At January 1, 1923, out of a total of over 1,500 local authorities under "voluntary" powers, less than 100 had taken steps to prepare schemes, although the Town Planning Act had then been in existence 14 years (or, deducting five years of war, a net nine years), and only ten local authorities had schemes finally approved at that date. At the present rate of progress it would take at least a century for all to come into line.

The Ministry of Health, with the best will in the world, could hardly enforce progress upon such a vast number of authorities, and, moreover, can only move after holding a Local Public Enquiry, where in all probability the forces of reaction, vested interests and procrastination, would be fully represented and do their best to carry the day.

The opinion has been widely expressed and is, I think, a well-founded one, that we stand now upon the eve of a boom period in private building, and that for the next five or ten years estate development will be fairly rapid. Is this boom development to proceed upon the old lines and perpetuate the mistakes of the past? I trust not. It seems to me, therefore, that to ensure development upon right lines and avoid such errors, the community must have further control by means of Town Planning, and that the time is ripe for the extension of "compulsory" powers. I suggest, therefore, that the answer



to the question should be an unhesitating affirmative, and that "compulsory" Town Planning should at once be extended to the following types of areas:—

(1) *Undeveloped Areas.*

(*a*) All County and Municipal Boroughs and Urban Districts, irrespective of size and population, such to be brought into line with the existing areas under "compulsory" powers.

(*b*) All Rural areas so far as main roads and user zoning is concerned—meaning by the latter the probable predominant use.

In considering the case of (*a*) it has to be remembered that Clause 16 of the Housing, etc. (No. 2) Act, 1923, extended the time from three to six years within which Local Authorities, who are under the compulsory powers, have to "prepare and submit to the Minister" their schemes. This, I consider, was a retrograde step and plays further into the hands of dilatory authorities. It seems to me it would have been better policy to stipulate that the Preliminary Statement or Draft Scheme must be prepared and submitted within three years, and the final scheme within the extended period of, say, six years. This would have ensured some steps being taken in the near future. I suggest a similar proposal with regard to areas included in (*a*)—

As regards (*b*), many Rural areas are in close proximity to busy cities and towns, and in order that a proper main road system, including securing the necessary widths, may be established, it is most necessary that compulsory powers be applied to such areas, which frequently are a bug-bear to their more progressive neighbours. The predominant use to which such areas will be put should also, as far as possible, be fixed at an early date in order that user of the adjoining areas may be co-ordinated with such and not be mutually destructive. Thus far, I think, schemes in such areas should proceed within, say,

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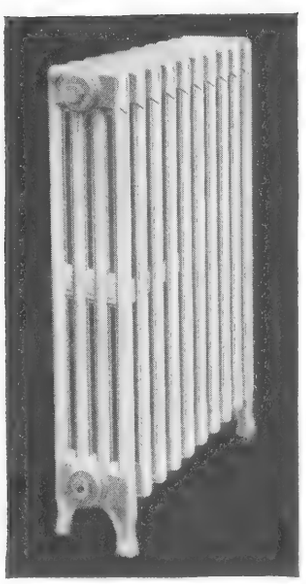

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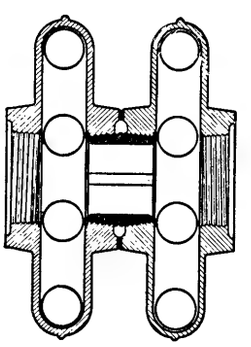

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three years, leaving detailed schemes to be prepared at a later date, when the necessity arises.

So far, we have only dealt with undeveloped areas, and we must now turn to :—

(2) "*Built-up*" *Areas or the Towns Themselves.*

This is not a new question by any means, and I note that so far back as 1912 the Medical Officer of Health for Birmingham reported as follows :—"To complete the City's Armamentarium against bad housing conditions, power is now required to enable Town Planning of the central areas, with a view to enabling the owners of property in the centre to develop their land, which has been cleared of bad houses, in a way which will be permanent and not liable to the risks which they are under at the present time, and which to a large extent prevent adequate housing accommodation being provided in these central areas."

Public opinion on this matter has undoubtedly widened and hardened since, and more especially during the past year or two, as in practice Town Planning schemes have shown the foolishness of controlling the development of the open land surrounding a town, while at the same time the Authority is helpless in regard to controlling the re-developments at the centre. Thus the good attained on the one hand may be nullified by the evils arising from unrestricted development and user upon the other. The restriction of width in roads, limit to provision of houses, placing of industrial buildings in unsuitable spots, and the prevention of the provision of open spaces in central positions, are all cases in point which illustrate the present short-sighted policy.

Instances of this need of control at the present time occur on every hand, more especially in districts where the ground leases are falling in and the freeholders re-constructing or re-building, in many cases for quite a different type of user, which will tend to alter the character of the particular area and may in fact very materially depreciate the surrounding property. Also frequently in such re-building a larger area is covered by buildings, and so further congestion occurs in these central portions of the town. Provided the new buildings comply with the local by-laws, speaking generally, no control or objection can be exercised or sustained by the local authority, whatever the use to which such buildings may be put. It will be realised, therefore, that in course of time in a particular locality the outskirts may be planned and developed upon the best possible lines with proper allocation of industrial, residential and business areas, and with adequate open spaces, but at the same time the central portions may be a horrible mass of congestion and ill-assorted buildings, used for many and varied purposes, without any regard to the amenity or convenience of the occupiers, and this state of affairs will yearly grow worse.

I suggest that compulsory powers in regard to the Town Planning of such areas are necessary, and to bring these "built-up" areas into line, such powers should by Statute have to be exercised by local authorities within a similar period as mentioned previously, viz., three to six years. The first necessity would be to *zone the "built-up area"* as regards *present user* and to *control the future re-developments* both in relation to and forming a part of the comprehensive Town Plan for the locality. Such powers would enable the clearance and re-construction of unhealthy and congested areas to be carried out as an integral part of the Town Planning scheme.

It is perhaps hardly necessary to point out that similar powers over the whole town, both centre and outskirts, have been exercised in the United States of America for some little time, and the business community and those especially acting for property interests are the most enthusiastic in support, recognising that not only the community but the individual benefits from such ordered control in the long run.

Space forbids me to more than make a passing reference to the effect of such an extension of Town Planning powers upon regional planning, but it will be apparent that the practical working out of a regional scheme must be simpler and more expeditious if all the local authorities in the particular region are under similar legislative compulsory powers, than as at present where one or more recalcitrant authorities can hold up and delay a scheme considerably, even if no worse.

In conclusion. It will be urged no doubt that the chief obstacle to such a mass of Town Planning within a limited period would be the congestion at the Ministry of Health and the consequent delay in obtaining criticism and approval by the Department. It seems to me such a difficulty is not insuperable, and even should great delay in approval by the Minister occur, I consider it must be better for schemes to be discussed, provisionally prepared, run the gauntlet of local criticism, and be hammered into shape, even if then held up at the Ministry, than, as in so many cases, for nothing to be done at all.

Delays are notoriously dangerous, and it appears to me that to further delay the extension of Town Planning is only to add very seriously to the troubles and expense of the rising generation. Education of the general public in, and appreciation of the value of, Town Planning is undoubtedly most necessary, and the fostering of local civic study and a fresh public spirit and conscience will give an impetus and driving power which the Legislature cannot gainsay.

"The Architect" Fifty Years Ago.

SEPTEMBER 5, 1874.

THE DECORATION OF ST. PAUL'S.

Mr. George Augustus Sala, in a roundabout essay in "Belgravia" for the present month, offers his contribution to the various suggestions as to the best way of decorating St. Paul's. After a characteristic narration of his visits to the Cathedral at different times, and a reference to the project which arose in Sir Joshua Reynolds' days to decorate it, he concludes thus :—

"It may be useful to glance briefly at the scheme drawn up, presumably with the unqualified approval of the Dean and Chapter, by Mr. Penrose, the official surveyor of the fabric, who has drawn a very graphic, albeit imaginary, picture of the effect which the aspect of the renovated Cathedral might presumably have upon a visitor coming in at the great west door. Here he would enter the nave, of which 'the original severity'—that is to say, its original bleakness and barrenness—would not be 'entirely subdued.' Still, it would be enlivened to some extent by inlaid marbles in the wall panels, and by the improved glazing of the windows on the north and south sides, into which some colour had been introduced, yet so as not to intefere with the admission of the full breadth of sunlight. I may here observe, that the 'dim religious light' afforded by richly dight and storied panes is an element in decoration pertaining exclusively to buildings in the Gothic, the Byzantine, and the Moorish styles, and that the introduction of a painted window into an Italian building, such as St. Paul's must essentially be considered, is simply an abomination. The effect, for example, of the exquisitely designed staircase of the Reform Club in Pall Mall is utterly spoilt by two preposterous windows of painted glass in recesses on the landing. But *retournons à nos moutons*. The visitor would find the vaults adorned with gilding and mosaic, and especially the large cupola over the westernmost bay of the nave would have a large mosaic painting on a gold ground, representing one of the miracles. Gold grounds, be it observed, like diapers, belong exclusively to Gothic, to Byzantine, and to Oriental decoration. The great spandrels of the arches of the central dome would contain effigies in mosaic and gold of the four Evangelists, which would amount to a simple plagiarism from the decoration of analogous portions of St. Peter's, in which the pen held by St. Luke is said to be 11 feet high. Above the gilded rails of the Whispering Gallery, an inscription on a gold mosaic ground, taken from the *dicta* of the Apostle of the Gentiles, would encircle the base of the dome. This idea is, again, coolly borrowed from the inscription round the drum of the cupola at St. Peter's, which, as all the world knows, runs thus :—'Tu es Petrus, et super hanc petram ædificabo ecclesiam meam,' &c. The peristyle of St. Paul's Mr. Penrose would adorn by placing statues—of whom ?—in the empty niches ; and in the dome itself he would (or he would have, for I know not if he be of the same opinion still) substitute (or substituted) a great mosaic picture suggestive of the 'Heavenly Jerusalem' for Sir James Thornhill's *rococo* subjects in *grisaille*."

DOUGLAS (I.O.M.).—40 houses are to be erected on the Hills Estate.

BOLTON.—The Parks Committee of the Town Council have accepted an offer by Lord Leverhulme to give £5,000 towards the cost of the erection of a refreshment room and shelter in Leverhulme Park in accordance with plans which have been prepared by Messrs. Bradshaw, Gass & Hope.

CHORLEY.—Plans by Messrs. Biram & Fletcher, architects, St. Helens, for the proposed Highfield Council School have been adopted.—The managers of St. Mary's School have prepared plans showing structural alterations to meet the requirements of the Board of Education, and the Town Council have asked a committee to consider the establishment of a laboratory for the medical officer of health and the school medical officer.—The Council are to seek permission for the erection of one hundred houses on the Highfield Estate.—Plans passed : improved elevation of proposed buildings at the corner of Market Street and St. Thomas's Road for Trustees of the late Mr. Houghton.

Boyle's latest patent "air-pump" ventilators have been applied to Cwmtwrch Council School, Wales. Supplied by Messrs. Robert Boyle and Son, ventilating engineers, Holborn Viaduct, London.

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Self-Imposed Burdens.

We frequently complain to one another that our fees, especially on smaller commissions, do not pay us for the labour involved in carrying out our work. This may mean one of two things, either with men in established practice that such commissions are relegated to assistants whose salaries amount to more than the fees earned in the time spent bring in, while with men who are just starting for themselves it may, and often does, mean that the smaller jobs coming to them occupy a large amount of their time, and yet do not provide them with a sufficient income. But it has to be remembered that if we are not busy we often spread work over a space of time far greater than we should give to it were we really busy. At first sight this may appear to be a gain to the client, but we believe in most cases that the architect who is pressed for time does better work than he would were he not compelled to get through his work quickly. His attention is usually more concentrated, and though his drawings may not be so meticulously finished his problem is often better brought out. If we are working "at white heat" we often seem to capture added inspiration which escapes us in our more leisured moments. In a word, if we are pressed we work with all our faculties, and if we are not we are often distracted by other thoughts, so that an architect may in reality have expended more thought on a problem in three days than he would had he a month at his disposal.

With the actual work of draughtsmanship it is otherwise, more drawing will be done in the longer period, and very much more care taken in "rendering" drawings, which is quite an additional and almost independent art and one to which many men become willing slaves.

They learn it in most of the schools and are often unable to prevent going on doing it mechanically, forgetting that it is little more than a matter of manual dexterity which may have attractions for many who are mentally indolent. We knew in the past an architectural assistant who never aspired to practise independently, who would from time to time take a junior's place and occupy himself with tracing in order that he might secure a rest, and we have little doubt that something of the like nature induces many men to eschew work which means the exercise of much thought. The first few days given to a competition will convince many men if they think the matter out that what we say here is true, for those days are disagreeable. We have for quite a long time nothing on which we can exercise our powers of draughtsmanship, but have, if we are to make progress, to spend our time in hard thought. Later on, when the pieces of the puzzle begin to take shape, we have something we can draw and the sense of strain begins to go. More than this, our problem usually becomes easier because the main bones of it begin to take form and we are confronted with the easier task of considering points in detail. But we have known many periods of something like terror, for ideas seemed to elude us and concentration on the problem almost impossible to achieve.

Planning has been often discussed and dogmatised about, but the nearest parallel we know to its real nature is that afforded by a game of chess. The accommodation to be provided are similar to the pieces in chess, the right moves are those which bring the accommodation into the best relative positions, just as the art of chess is to consider the relations of the pieces to one another with a view to arriving at the best offensive and defensive strategy.

And design, like chess, needs complete concentration, especially its most important and dominating feature, planning.

Now the self imposed burdens of the architect are his elaboration of draughtsmanship and rendering, and the attempt made by many to raise architectural draughtsmanship to the same position which drawing and colouring assume to a painter. But the object and end of the two callings is entirely dissimilar, in the one case the rendering is the sole end and aim, in the other it is a mere detail. Our buildings will neither be better nor worse because we have made beautiful drawings of them, but they will be worse if we have allowed our minds to dwell rather on the rendering of our ideas than on those ideas in themselves.

We are not arguing that drawing is unimportant, or that skill in draughtsmanship is not a faculty it is well to acquire, for unless an architect can formulate his ideas on paper he would be powerless. We cannot draw too well or have too much skill in showing in clear lines exactly what we mean, but we may waste a prodigious amount of time in decking out our ideas in pleasing colour, and we are but adding unnecessarily to our burdens if we as a profession teach the public to expect us to do so. The public come to us for buildings, not for drawings of them, and it is for the profession as a whole to agree on the reasonable medium by which our ideas shall be conveyed. If most men were to offer their clients perspective sketches showing the design to be built, in a comparative short time the average client would demand it, and we should have added to our burdens without any adequate reason. We are alone responsible for the immense amount of work demanded in most competition conditions. The scale of the drawings asked for is generally unnecessarily large, the number of drawings is often too numerous. It seems to us quite unnecessary to ever demand that competitors should send in half-inch details of their work, because a competition is or should be decided on the general lay-out, and if an assessor cannot form an idea of the architectural quality of the design from a small scale elevation, he is unfit for his office. A patent absurdity is to ask competitors to shade their drawings, for a competition is not an essay in an art school, but a means of obtaining the best building scheme possible. We were frequently asked to show drainage lines on competitive designs, and we have known of baths competitions where the unfortunate competitor was asked to show the

pipes necessary for the scheme in lines of differing colours. And yet competitions are not usually decided by the promoters, but by the assessor appointed, whose advice and guidance are sought. We may say with little fear of contradiction that very nearly half the work asked for in our competitions might be eliminated without anyone being the worse off.

The result would be that a profession would greatly ease the burdens it has to carry which are solely self imposed and do not in any way impress the general public or serve its interests.

We have frequently been to exhibitions of elaborately finished architectural drawings with members of the public, but we never remember such exhibitions arousing great interest, and the reason is easy to understand.

If we compare an exhibition of water colours with one of the Rome Scholarship drawings, we should recognise that for people without technical knowledge the one is almost unattractive, while the other may delight an ordinary visitor.

Why then should we as a profession spend much time and trouble on the manner of presentation of design when it is the matter alone that is of importance? Further, we hold that the elaborate methods of presentation so much in favour to-day do not make design clearer, but rather more obscure, to the architect. We can judge of design better from simple line drawings, and those who cannot appreciate effect from clear scale drawings and who cannot realise what would be the effect of light and shade ought themselves to recommence their architectural studies, for they demonstrate their elementary ignorance. No other body of professional men that we know of do more unnecessary work to the detriment of thought and consideration of more essential things.

Our Illustrations.

SHOWROOMS FOR THE GAS LIGHT AND COKE COMPANY, KENSINGTON. H. Austen Hall, Architect.

BUNGALOW, FULLER'S WAY, SURBITON. F. Leonard Poole, Architect.

PROPOSED HOUSE, CHEAM, SURREY. F. Leonard Poole, Architect.

Notes and Comments.

Alleged Advantages of Direct Labour.

A Newcastle paper states:—"Evidence of the success of direct labour is pouring in from all parts of the country. A few instances I may mention are: West Hartlepool saved £40,000 on the building of 261 houses by direct labour; Irlam built by direct labour houses at £740 each as against £1,060 private contractor's tenders; Tonbridge £690, as against £976, Newmarket £761, against £1,000, Newbury £600, against £875, Swansea £688, against £761, Bradford Corporation, on their Scarhouse Waterworks scheme, saved no less than £17,223 on lowest contract price by employing direct labour.

"Apart from housing, the following responsible statement by Sir Joynson-Hicks in the House of Commons on July 17, 1923, is interesting. He stated that the printing of the forms for the Representation of the People Act had been done by the Office of Works 65 per cent. cheaper than the lowest outside contract."

We do not doubt that cases can be instanced where direct labour has resulted in savings being effected, but we are sure that if sufficient data were examined it would be demonstrated that it had usually resulted in a loss and not a gain, and we should not be inclined to take the instances quoted at their face value without fuller evidence. The London County Council, after an exhaustive inquiry, put an end to their Works Department, and we may be sure they would not have done so had they not been justified by facts.

Cheaper Methods of Building.

The Minister of Health has set up a committee, with the following terms of reference:—

"To inquire and report as to new materials or methods of construction which are or may be available for the building of houses for the working classes and to make recommendations as to the organisation required for securing the adoption and use of approved new materials or methods by local authorities and other bodies or persons providing such houses."

The committee will be constituted as follows: Sir Ernest W. Moir (chairman), Sir Frank Baines, Sir Charles T. Ruthen, Major Harry Barnes, Mr. John A. Brodie, Mr. R. Coppock, Mr. E. R. Forber, Mr. G. Hicks, Mr. K. J. C. Johnston, Lieut.-Colonel Cecil B. Levita, Mr. W. H. Nicholls, Mr. A. G. White, Mr. C. E. Whyte, Mr. J. Wilson.

The inclusion of Mr. Coppock is a little amusing, but Mr. Coppock can at least tell his colleagues how building has been made as costly as it is, and the manner in which those whom he represents are determined that it shall not be readily cheapened. If labour will not give a *quantum meruit* for that which it receives the only course is to find out how the greatest amount of building can be carried out with the smallest call on that expensive luxury, the labour of the building trade unions.

New Bridges.

We have never been able to understand why proposals for forming covered sideways for pedestrians in the design of all new bridges across the Thames has not been made an essential condition. The public can get a fair amount of protection from driving rain and wind in the streets of a city because they are sheltered on either side by the enclosing buildings, but no such protection is possible on an open bridge, while the course of the river forms a channel along which rain and wind hold uninterrupted sway. If it is considered desirable to attract business to the southern side of the river, surely it is worth considering how crossing the river can be made easier and pleasanter for foot passengers. The change would be one which would add to the designer's opportunities rather than detracting from them, while the cost, though considerable, would be but a small fraction of the whole. There is something to be said for building on either side, if only at points, but there is the very grave disadvantage that any attempt to emulate mediæval precedent would involve greatly wider bridges, the cost of construction of which would probably prove prohibitive, but no such reason militates against a proposal to cover in sidewalks which must in any case be provided. The present system, except for short bridges or those in country districts is, frankly speaking, a little barbarous.

That Extra Half-hour!

The summer-time expansion of working hours from 44 to 46½ is evidently going to prove the workers' chosen ground of battle, under the wise leadership of Mr. Coppock. Evidently we may have a little rest since summer-time is almost at an end and the opposing forces have another six months to consider the issue before them. We should much like to hear the reasons which render the extra half-hour so obnoxious to sapient Labour leaders, for we can see none ourselves. But we hope that a few months' quiet consideration will induce men to see things in a more reasonable aspect.

A Scheme of Co-operation.

The Convener of Dundee said at a meeting of the Town Council, that he had met a deputation of representatives of the masters in the building trades, who suggested that the Corporation and the trades might co-operate in the production of houses. The suggestion was that the Corporation should issue schedules and plans, and should guarantee a sufficient number of houses to keep the trade employed, the trade to build a minimum of 200 houses per annum. The allocation of the contracts were to be made by the Trades' Association, and the masters would guarantee that 50 per cent. of their staffs and plants would be placed at the disposal of housing. The Corporation were to pay the cost of materials, men's time, oncosts, and masters' profits instead of contracting the work out.

He (the Convener) did not say that he was in favour of the scheme, but, in view of the fact that the suggestion had the support of a large number of the various building contractors in the city, he thought the Committee should consider it.

The proposal is one of cost plus profit for half a firm's business, and might work well, though it is questionable whether the ratepayers' interests would not be better protected under the usual contract system. The idea of definitely tying up half the energies of the contractors to housing is evidently the attraction of the proposal.

Amsterdam.

A most attractive little book has been issued by the municipality of Amsterdam, beautifully illustrated and printed, the first part of which gives a good account of the growth and development of the city from early times; while the second section is devoted to a description of the work now being carried out in the provision of housing. As is well known, Holland has introduced some far-reaching legislation in respect to building, and particularly to housing. In Holland, all towns of over 10,000 population have to lay down extension plans and to carry out surveys of buildings erected since 1921, and to provide for the revision of byelaws. In Amsterdam, a tenement house might not exceed four stories in height, but in 1912 for a small part of the city adjacent to the Y, this was reduced to three storeys, and in 1919 to two storeys. The Government assists the municipality by granting advances from which they lend money to owners of property needing repairs which they cannot afford to make. Power is given to acquire unsavoury property, while the Government advances money at practically the rate of interest they themselves have to pay, for the purchase of land, the erection of houses by building societies, and for municipal schemes of like nature; 6,335 municipal houses have been built and let; 474 are in course of construction and 1,570 projected; 11,253 dwellings have been erected by building societies; 1,640 are in course of construction and 2,670 projected. Private owners, with help from the municipality, have erected 6,799 houses, are building 4,857, and propose to build 4,816; totals which show that the greater bulk of the work is being carried out by private owners with assistance. The examples illustrated are pleasing in character, though often marked by a quality of weird picturesqueness which is perhaps not entirely out of character with old Holland.

Outspoken Correspondence of a Young Architect.

My dear E.—I am proposing to compete in rather a big Architectural Competition. You have been frequently successful in competition, would you give me the benefit of your experience in these matters.

Yours sincerely, B.

Dear B.—In reply to your letter about Competitions. Yes, I have been fairly successful and now that I have secured a comfortable practice and do not propose to enter into any more competitions I do not think I shall be doing myself any harm in giving you the benefit of my experiences and methods.

1. Read the conditions carefully and put the competition aside if it is clearly impossible to provide what is asked for at something like the sum fixed.

2. Put it aside if the conditions do not seem to be clear and reasonably possible of fulfilment; most conditions are drawn up by an assessor and therefore should afford some indication of his judgment.

3. Put it aside if an unnecessary amount of work is asked for.

4. The weak spot in the system is that few assessors appear to have a just regard for their own instructions which they frequently disregard in their awards. They say they are appointed to select the best design which is only true with a reservation. Their duty is to select the best design which falls within the limits of the conditions they have laid down. No lawyer would hold himself justified in ignoring the letter of the law and competition conditions on the law laid down by assessors for competitors. Another blot on the system is that there is—unlike the law—no Court of Appeal to correct mistakes, and no redress for cases of clear injustice, and I may add no sympathy with the most clearly justified protests.

5. But should you compete do not be induced to try to obtain the favour of an assessor by giving him a design which you think he will like because you have based it on a study of his work. In a majority of cases this will lead to failure.

6. If you see what seems to you a good solution which conflicts with some condition laid down, it is often wise to risk the chance of disqualification because very few architects are judicially minded, most assessors tend to hamper themselves with conditions which never should have been inserted and which they themselves would never have inserted had they given a tithe of the consideration to the problem which every competitor is forced to give in the course of weeks or months of work. You cannot know how the shoe will pinch or where it will pinch till you have worn it.

7. You must, as things are, look on a competition as a lottery, for which it is unwise to put aside any more definite chances. The majority of competitors end by having lost both time and money, their net gain being some very useful experience.

8. It is a fallacy to assume that because an architect is a talented designer himself he is fit to act in a judicial position, but no other body of men would so tamely submit to constant miscarriages of justice as architects do at the hands of their own colleagues, and there is not the slightest indication that the profession is likely to put its house in order. The system as it exists to-day may be variously described as a monument, illustrating either the faith, hope or stupidity of the profession, for the one thing they appear to have no idea of the essential conditions underlying the administration of justice.

Yours sincerely, E.

PORTSMOUTH.—The Board of Education have approved of the site for the northern secondary school for boys.

OLDHAM.—The Corporation Health Committee have instructed Messrs. C. T. Taylor & Roberts, architects, to prepare plans and estimates for a children's hospital at Westhulme.—A pavilion is to be erected at the Watersheddings Recreation Ground and at Alexandra Park. Plans by the surveyor.

SHEFFIELD.—The Ministry of Health have approved of the following proposals:—Further sanatorium accommodation for children, the provision of ultra violet ray treatment at the tuberculosis dispensary, additional shelters and beds, removal of surgical tuberculosis clinic from Norfolk Street to the dispensary in Queen's Road.—The Housing Committee have accepted the tender of Messrs. W. Marlow & Sons, Ltd., at £88,744 for the erection of 198 houses on the Manor Estate.—Consideration is being given to a proposal to erect a further 300 houses on the Manor Estate at a cost of about £154,000.—It is proposed to proceed as soon as possible with the extension of Rockingham Street fire station at a cost of £39,700.

Among the Alps of Dauphiné.

3.—The Monastery of the Chartreuse and Pont en Royans.

H. A. J. Lamb, A.R.I.B.A.

THE FRONT ENTRANCE TO THE MONASTERY OF THE CHARTREUSE.

A PICTURESQUE CORNER OF THE VILLAGE OF ST. LAURENT DU PONT.

Apart from mountaineering expeditions, for which Grenoble is a convenient centre, there are two excursions to be made. A visit to the ancient monastery of the Chartreuse and to the picturesque village of Pont en Royans, which I suppose very few of the visitors to this district omit, since the journey involves a trip through some of the finest country of the Dauphiné, at the end of which in the first instance is a fine historical monument, and in the second a village with curiously picturesque features. By means of motor buses, which make frequent trips to the Monastery, from Grenoble, it is within easy reach of all. An alternative method, and perhaps more interesting, is to take the train to St. Laurent du Pont, a picturesque village at the entrance of the gorge leading to the Grande Chartreuse, and continue the journey on foot, a distance of about 5½ miles to the monastery, the road winding through this narrow gorge, which incidentally replaces the road constructed by the monks in the fifteenth century and was opened to traffic in 1856.

Shortly after leaving the village one enters the Désert, through which the road passes under several tunnels cut in the rock, and is hemmed in on either side by the pine covered rocks of this narrow defile.

Before leaving St. Laurent du Pont the opportunity should be taken of sampling the well-known liqueur invented by the Carthusian Fathers, and which has now developed into a big industry, and which can be tasted here for a few pence (in English money). The elixir from which the green chartreuse is derived, and which is the oldest and strongest, was first produced in 1607. The yellow, and perhaps the most popular, was discovered in 1840; the white chartreuse, the weakest, being produced a few years earlier. The village, which contains a thirteenth century church, was destroyed by fire in 1855, and has been completely rebuilt, notwithstanding the comparative modernity of its buildings

MONASTERY OF THE CHARTREUSE.

some of the houses are extremely picturesque, with their deeply overhanging eaves, strutted up from the walls, and in many cases completely overrun with creepers. The church, which was rebuilt by the monks, contains some fourteenth century choir stalls from the Chartreuse de Curière, founded in 1290, and was at one time a sanatorium of the Grande Chartreuse Monastery.

The imposing buildings of the monastery occupy twelve acres, and are situated amid the pine forests of the mountains and are completely isolated, and must have made ideal surroundings for the solitude the monks desired.

St. Bruno, the founder of the Carthusian Order, was born at Cologne. In 1084 the ecclesiastical authorities at Rheims wished to make him an archbishop, whereupon he fled with six companions, and eventually reached Grenoble, his object being to find a lonely spot where he could devote himself to prayer. The Bishop of Grenoble lead him to the valley where stands to-day this great monastery and which in its earliest stages consisted of a few log huts. In 1090 the Pope summoned St. Bruno to Rome, where he died eleven years later in a convent he founded at Calabria.

Unfortunately very little of the early monastic buildings remain. In the twelfth century it was practically destroyed by an avalanche. In the thirteenth century building on a large scale was commenced. These were destroyed by fire and rebuilt several times, and finally the buildings which remain to-day date from the latter half of the seventeenth century, with the exception of part of the great cloister, which is 240 yards long and 25 yards wide and dates from the thirteenth century, the Chapelle des Morts fourteenth, and the refectory fifteenth century.

Completely surrounded by a wall about 10 feet high, entrance can only be gained through the main gateway, which opens on to a wide forecourt across which visitors are now conducted at frequent intervals for a tour of the most interesting parts, which occupies about three-quarters hour, on payment of a small fee.

The stone buildings with high pitched slated roofs, the better to throw off snow, and hipped with copper, present a lovely spectacle, for it will be remembered that the monks were expelled by law in April, 1903, and removed to Certosa, in Italy. It seems a great pity that these buildings should remain empty, when they might possibly be utilised to-day as a State Sanatorium or put to some such practical use.

One can easily imagine the strict life the monks must have been obliged to lead. They used to wear white gowns. About 40 of them never left their cells except for the daily and nightly services and to walk once a week in the grounds outside the walls. They took their meals in their cells except on Sundays and feast days and were allowed to talk to no one without the Prior's permission.

The lay brothers, of whom there were about 100, were dressed in brown.

The cells of the monks branch off from long corridors, and consisted of several rooms for each occupant, opening out into a small enclosed garden. In one corner of the cell rested the wooden bed in a curtained alcove, a table, chair and shelf for books were the only articles of furniture. On the left of the main corridor one can see the Salle de France, formerly the visitors' dining room. Visitors used to be allowed to attend in the gallery of the fifteenth century church, the *office de nuit*, at midnight, during which each monk used to conceal the light from his lantern at certain intervals.

MONASTERY OF THE CHARTREUSE.
A SMALL CHAPEL ROOFED WITH WOODEN SHINGLES.

At the lower end of the Great Cloister is the Chapelle des Morts (1386) built over a vault to which the bones of early Carthusians were transferred in 1132. In the cemetery adjoining, the graves of the monks can be seen. They were buried face downwards without coffins. Those of the higher Orders being marked with stone crosses, the remainder with crosses of wood without inscription.

Women were, of course, rigidly excluded from the monastery, so that it is interesting to note that the only woman who had ever seen the interior of the monastery in occupation was Queen Victoria, who paid a visit there during one of her journeys to the Continent.

The journey to Pont en Royans must be made by motor coach, a distance of about 34 miles from Grenoble, a circular tour is usually taken, so that one way the route passes through the Grandes Goulets, near Les Baraques, a series of tunnels cut through the rock, and on the edge of the gorge, constructed between 1844 and 1851, and returns along the Gorge of the Bourne, via Villard de Lans. For magnificence of scenery and the thrill of travelling along a road hewn in places out of the vertical mountain side, this trip would be hard to beat, but one is scarcely prepared to see houses also clinging to the rock, as one does on arriving at Pont en Royans, the old capital of the Royans. These houses, or *maisons suspendues*, as the French call them, literally overhang the rocks on which they are built above the river Bourne. They make a weirdly picturesque feature, as will

VIEW OF THE MAIN ENTRANCE AND ONE OF THE MANY SIDE CHAPELS OF THE MONASTERY.

WITHIN THE FORECOURT, SHOWING THE HIGH PITCHED ROOFS WHICH ARE HIPPED WITH COPPER.

THE MONASTERY OF THE CHARTREUSE.

PONT EN ROYANS.

PONT EN ROYANS.

A TELEPHOTOGRAPH WHICH SHOWS THE EXTRAORDINARY TOPHAZARD CONSTRUCTION OF THE OVERHANGING HOUSES.

ONE OF THE MANY PICTURESQUE STEPPED SIDE STREETS AT PONT EN ROYANS.

be seen in the photographs. Built of stone, rubble, lath and plaster, with here and there baulks of timber to prop them up, as it were, without any preconceived plan of construction seemingly—so that one is strangely reminded of a drawing of Mr. Heath Robinson come to life!

Good trout is found in the river below, so that it should not be difficult to fish direct from the kitchen window.

One narrow main street runs at the back of these houses, behind which up attractively stepped alleyways lies the remainder of the village, built against the side of the mountain, and appearing more stable than those on the river front.

The London Salon of Photography Exhibition.

At the galleries of the Royal Society of Painters in Water Colours 5A, Pall Mall East, S.W.1, an International Exhibition of the London Salon of Photography is now open to the public. The technique of our leading photographers is certainly very wonderful. They are able to impart character, grace and interest into portraits of the plainest of people. To-day no feelings are affronted by all kinds of formerly impossible poses as applied to private portraits. The mantelpiece may even be adorned with a photograph of your hostess in only the scantiest of garments. The photograph itself is, of course, a wonderful exhibition of technique; the tones and modulations of light and shade, in addition to the curious mounts upon which these photographs are mounted, all lend to the portrait a refinement which perhaps goes some way to hide its daring.

The exhibition reveals many composite photographs. In this way photographers attempt to show their artistic ability. On an occasion they photograph a pretty child; some other day they see a charming garden. By clever manipulation the two are brought together and a picture of some interest results. There is, of course, merit in these compositions; they do express an individualistic appreciation of certain values which in combination produce pleasing effects, but it can hardly be called art. It might even be possible that the photographer had some definite composition in view and sought diligently until he had collected all the necessary negatives. The resulting picture, were it ever so pleasing, would still be a faked photograph and nothing more. Photographers claim that these fakes are works of art; they seem to base their contention on the fact that the human mind need not select to express its artistic feelings in paint and pencil, but might use photography as a medium. This argument would make a strong appeal to us were it not for the fact that the production of the composite photographic pictures is purely mechanical. Let us take it that a child's arm is not quite happy in its pose; unless the photographer employs a new negative he is obliged to endure the defective composition. If he paints out and redraws by hand and brush the arm, his technique is no longer pure photography and his result a greater fake than ever.

We feel that photography would realise its aspirations far more easily were its exponents to create an expression characteristic of its technique. And this is not an impossible attainment: the road lies, to our mind, in a direction which seeks to find and represent subjects which the artist cannot render with any marked hope of success. To cease from creating views which our Victorian artists produced without number. Movement and action are the slaves of the instantaneous exposure, and should be productive of a wide range and scope. Added to this, pictures which represent vast scenes of action, such as a military review, have never been successfully rendered by the artist. But in pastoral scenes and the like the photographer will never equal the artist and would be well advised to give up the unequal contest. The public to-day are out of sympathy with imitations; a woolly photographic print without the charm of a crayon drawing will never replace the latter even if it is produced at a tenth of the price.

"The Architect" Fifty Years Ago.

SEPTEMBER 12, 1874.

EXTRAS.

Extras are the scourge of the architect and the dread of the proprietor; and even the contractor, though they often form the most paying portion of his contract, will admit that they have their unsatisfactory side. In short, universal consent condemns them, and yet universal practice recognises them, and so sure as a building contract comes to be concluded and the accounts stated the dreaded heading "Extra Works" makes its appearance, and all the unpleasantness of dealing with it begins to make itself felt. Extras must, therefore, rise either from some defect in our system which has hitherto been overlooked, or from some natural cause, the operation of which can rarely be counteracted; and it is, perhaps, to a combination of the two that we must attribute their presence. Architects proceed very often on the supposition that it is possible, even in a large and complicated undertaking, to foresee from the beginning all the details of the entire building, and to provide for them; having done their best to describe and draw and specify all these matters, they then not unnaturally go on to give further consideration to the building as it proceeds, to substitute for first thoughts the results of mature consideration, and to contrive from time to time expedients for overcoming difficulties which present themselves; and sometimes to arrange for considerable modifications. In short, it has become usual to deal with the design when first worked out as though it were final, and then afterwards to finish and improve it. This is manifestly inconsistent, and it is the cost of the after-thoughts, the alterations, and the improvements which goes by the name of extras. . . .

One of the objections raised by many practical men to the London system of taking out quantities is the opportunity which it offers for very great detail in the measurement of extras. Where they are simply set against other works which are pretty nearly equivalent, this does not so much matter, except that it gives rise to an extraordinary amount of measurer's work being done (and of course paid for); but where the work is entirely additional, its cost is often raised very much indeed by the painful minuteness with which it is cut up, and the immense number of items, each of which has its price, named in the bill. Here the system which, as we pointed out in a recent article upon Quantities, has been practically brought to its present shape by builders, tells very much to their advantage, and against the building owner: while the disposition to make out of every variation (*i.e.*, substitution of one work for another) an enormously long bill of deductions and an equally long bill of additions seems on the increase.

Some architects have the envied reputation of adhering closely to their contract amounts. They gain this reputation by really seeing that this is a matter of great importance, by keeping it constantly in view, and by taking all the means in their power to reduce or shut out extras. These means are no secret; we have mentioned the chief in naming the introduction of money provisions to meet contingencies; the resolute avoidance of anything like expensive variations as the work goes on, unless there be either a money provision or a sufficient reduction to balance the expense incurred; and the use of a separate agreement for each *bonâ fide* extra ordered. We may add also that contractors, as well as architects, vary very much in their reputation on this score, and that those architects who feel bound to take scrupulous care of their client's pecuniary interests will avoid such contractors as are notoriously "hungry" after extras.

Fifty Years Hence, 1974.

Having by a process of thought transference seen your future files of the next fifty years we feel that quotations from your pages would be to a great extent unintelligible without explanations. Names of architects occur who are unknown to-day, reference to buildings yet unbuilt and to conditions which we can only begin to understand by forming a general picture, while your illustrations though as now excellent are elusive.

A few of the political events must be briefly referred to by the writer, for without them what will be would have been impossible of accomplishment. Men in 1924 are hampered by an impossible political system which will be relegated to the limbo of useless antiquities. A party representing a clear minority of the people to-day holds power, but this will be impossible in 1974. Proportional representation will be finally adopted in 1938 and with it new conditions will obtain. Opinion representing every section, each shading off to right and left, will afford no majorities for party experiments and party war cries will be unknown. These party issues dead, the whole of our legislators will look for reforms on the necessity for which there is general agreement, and money, time and patience will be saved. Two years after proportional representation will have been instituted, in 1940 a decimal system of currency and metric weights and measures will be established, and business men will begin to realise how much time had been wasted. Within a few years afterwards the law of ancient lights will be repealed and all property owners will be free to develop their sites without hindrance as long as they observe municipal regulations. A reform of our system of rating will follow, property owners being assessed on the basis of the income derived locally and not on the extent of the property owned, thus relieving them of the fear of higher rating consequent on rebuilding delapidated premises, and will prove an immense impetus to development. It will be realised in this future age that there is no architectural beauty which cannot be largely obliterated by vulgar advertisement which have proved a tax on trade without producing a beneficial result, but which no one in 1924 could afford to neglect for fear of his next door neighbour outdoing him in display. In 1933 all displayed advertising marring architectural features on buildings will be prohibited and in all our big towns men will be hard at work removing lettering from the fronts of buildings and taking down illuminated signs. Shortly afterwards every municipality will enact bye laws under which the name of a trader can only be placed on a fascia above his shop with the street number clearly displayed. The style of lettering, the size and character of the fascia will be fixed by various municipal authorities. But this will be only the first step towards a further reform. Inasmuch as a shop was defined as being a building whose owner wished to attract custom from the public it will be considered that shop property should be municipally owned, especially as it is intimately mixed up with considerations of traffic. In the years to come people will not consider this a reason for spoliation, and private owners will be fairly compensated for the property they relinquish. The municipality in building new streets in shopping districts and in regulating property acquired will take the view that the stall in a market and the shops in a street are on a similar footing. Just as the public in 1924 considered that public building should be commodious and handsome, so in the years to come they will consider shops should be suitably designed and should rest on adequate supports evenly distributed along a frontage. But they will not think that Mr. B. has any right to attract attention from Mr. C. by the size or peculiarity of his building. They will each have the opportunity of taking as many bays along a street front as they care to pay rent for, filling them in suitably, and the frontages of whole streets or blocks between cross streets will be uniformly and harmoniously designed as a whole, of which the shopkeeper occupies a part as he would in 1924 in a market. More than this, it will be recognised that horizontal rather than vertical division is convenient, we shall have party floors rather than party walls, a further fire protection as fire spreads vertically rather than horizontally. Our greatest shopping centres will be double or treble deckers, or even in the case of Regent Street in a greater number of storeys with moving stairways at convenient points, and bridges across side streets, thus increasing the values of shopping property while reducing the sorts of shops. A pleasant feature in some of the outer suburban districts will be the shops with balustrated terraces over, from which houses and flats are accessible and are removed by setting back from the noise of traffic. Luminous paint had been invented and played with in 1924, but in the years to come invention will master the problem of light-giving surfaces which will very largely eliminate the necessity for either electric light or gas. A substance will be invented, the chemical nature of which enables it to absorb and diffuse light, and this substance formed into panels of varying sizes will give out a light approximating to that of daylight. The amount of illumination required will be produced by a greater number of panels of their size. From time to time these panels will need recharging by being exposed for a series of days in strong sunlight. With the new control of shopping quarters will come another improvement, the grouping of certain shops of a class into definite localities. This is a reversion to the custom of many hundred years ago when each craft had its own quarters. Anyone wanting to purchase goods of certain defined classes will know definitely where he can choose between those carrying on that trade. The active production of goods which are now made in one place and sold by middlemen will be to a great measure eliminated by the growth and use of electrical appliances run by power so that many shopkeepers will produce goods made on their own premises. The great stores and "universal providers" will be less in favour, people once more preferring to deal with those conversant with one craft only.

Restaurants, cinemas and other places of entertainment and refreshment will naturally be distributed where they best serve public convenience, the new system of balconies giving increased facilities for entrances at different levels, which will be analogous to a site having two street frontages instead of one, and will also promote safety by dividing crowds, separating them on different levels.

In domestic architecture many improvements will be introduced. In our towns hot as well as cold water mains will be run, every house being supplied with all the hot water needed without having to burn coal or gas. Cooking will be chiefly carried out by electrical contrivances or by gas utilising fittings better adapted for their objects than those we know of to-day, while electric radiators of different makes and gas fires will serve for all heating purposes. "Washing up," that bane of to-day, will be simply effected by putting all dirty dishes and implements into a steam chamber, afterwards pressing a lever and raising the racks containing them to a heated chamber under from which they will be removed dry. The extra heat required to raise the water to boiling point for this and other purposes will be supplied by an electrical heater under the small hot-water chamber supplied by the main or by gas. All our new streets will have tunnels beneath them in which pipes, wires, and conduits will be laid, so that no necessity will exist for hacking up traffic ways for repairs, and this system is being rapidly extended to the older roads. All these will be covered with a slightly elastic but hard covering, on which traffic will make little noise, but will have a far greater lease of life than any substance known in 1924.

Our railways, entirely run by electrical power, will have terminal stations some ten miles from Charing Cross, and will be interconnected by non-stop tube railways with each other, and with central London, while goods will be conveyed by a system of special ducts to convenient points of distribution.

The nineteenth century saw the great expansion of industrialism. At the present time we are marking time, but fifty years hence the direction of our national activities will again be clearly marked and defined. Our population, though increasing in size, will not expand at nearly its present ratio. The potential wealth of the various States of the Empire will be greater, and the all-British Customs Union will in the end mean that nine-tenths of our exports and most of our imports will be those of British lands.

Our second legislative body will be a Council of the Empire, in which every British State sends representatives in proportion to its population, and this Council's decisions will control all foreign and commercial policy. A world peace will be effected not by idealism but by the fact that the great Powers of the future are too equally powerful to find it advantageous to go to war with each other and too strong not to be able to impose their will on the remainder of the world.

America will suffer from the effects of the depletion of her natural resources, while her manufacturers and merchants can no longer secure the world's markets open to her in 1924. The new Union of Latin-American States stretching from the United States to Cape Horn, and now well administered, and the reorganisation of China will have a sensible effect on American commerce. America will have little food to export, while the British States can supply all their own requirements.

But more than this, the discoveries of Dr. Crookes in relation to the productivity of the soil will be carried further, and means found for so enormously stimulating it by nitrogenous substances that agriculture in England will become very profitable. This and the increased attraction of our towns and their freedom from smoke and architectural beauty will tend to attract those having business there to select them for residential purposes. Country houses falling into decay will be often converted into farms.

Villages will grow, and be remodelled and developed on Town Planning lines. Farming will become a very profitable business relieved of much of its tedium and monotony by the use of machinery. Farms were either run by co-operative companies or by the individual owners or alternatively by tenants who pay the owner as rent a fixed proportion of the profits made, while the large farming centres formed settlements in themselves. Trade disputes will be few, for after futile years of recrimination and labour difficulties Labour learnt that the well-being of every industry depended on the satisfaction of many interests. In each trade a yearly inquest will be held at which the relative share of profits between labour and capital will be adjusted, each party agreeing to carry out its agreements in the interests of all. The employer and the workmen who failed to observe the agreements entered into will be fined or dealt with by special courts, on which each side had its agreed representation.

Architects, contractors and operatives were all either corporate members of the Royal Institute of British Architects or affiliated with it, and it will be virtually impossible to get any building erected unless it is designed by an architect, this result being effected without legislation, for the Governments of fifty years hence will recognise that these are matters outside their scope. No compulsion will be permitted by law.

These changes will come about after years of experiment, and will come through the tardy recognition of the fact that the special interests of any class or section of the population can only be secured by a policy of searching for the means to secure the best interest of the whole community, and that artificial advantages secured for any class or section cannot be other than of temporary duration.

We will try at a subsequent date to give more detailed descriptions of the changes of the future, but thought transference at present often falls. One great difference which had far-reaching effects was that whereas in 1924 we had to recognise the existence of much misfortune and misery, in 1974 conditions will be so simplified and improved that it was felt by all that those who failed to secure reasonable happiness and tolerable conditions of life were responsible for their own misfortunes and met with little sympathy or assistance. They were not a class who were catered for by politicians, and were consequently a very small and diminishing section of the population.

The Sussex Archæological Society's Annual Expedition.

Something of architectural interest attaches to most of the annual meetings of the Society, but this year an expedition of unusual range was undertaken, owing to the facilities offered by the hiring of motors to-day.

From Lewes and Brighton—the starting points—to Battle and Penhurst is a far cry; but the journey is of the essence of Sussex, by Downs and Weald, past the Pevensey level, and round the grandest portions of the Sussex oak woods, once the cradle of the English navy. Iron in the valleys below; water with the iron; and on the slopes the noblest oaks in England, not by the thousand, but by the myriad still—no wonder that the county was so long the most important—speaking navally and therefore nationally—in the kingdom.

And it is not for nothing that the hills and slopes of Senlac are still green with the Spanish yew used by our English bowmen in preference to the stiffer English variety. The Monks' Walk at Battle, a few yards from where Harold fell, is made of them; and it was with the Monk of Battle that the expedition began.

Battle Abbey, familiar to all visitors to Hastings, boasts the noblest fourteenth century gateway in England; but it is the relics of the Abbey itself—the great roofless Dormitory and the crypt below, once a scriptorium, which impress one most. There is no more glorious Norman work in England than the latter, with its admirable vaulting and pillars graceful beyond the Norman wont; and the parish church, built by the monks some twenty years after the Abbey was finished, is worthy of its founders, in spite of the vast amount of rebuilding nearly a century later which has made it one of the great examples of Early English work. The strange Anchorite's Window high up on the north wall; the two brasses in the chancel; the glorious alabaster monument of Sir Anthony Browne (*ob.* 1548), with its remarkable Renaissance character; the remains of old glass; the singular French capitals, primitive yet effective; the rare and striking stone turrets on the East End, all give the church a character of its own consonant with the Anglo-French character of its founders, and the admirable lecture delivered from the pulpit made clear the history and development of the building, which, however, suffered acutely from the activities of the late Mr. Butterfield many years ago. A stranger contrast than the tiny, and wholly unrestored, church of Penhurst, high on a hill outside the wooded ranges of Ashburnham Park, it would be hard to find. The delightful Decorated screen and south porch, the old woodwork, the carved pulpit, the grand king-post and rood-beam, make this little and well-cared-for building one of the most perfect examples of a lesser parish church, and the fact that it was on the line of march of Harold's troops is strangely evidenced by the discovery three miles away, some years ago, of a pot of nearly 3,000 English silver pennies, none later than the Confessor, which must have formed part of the pay chest of Harold's army, since such a sum could hardly have been in the possession of any private individual at the time.

Ninfield, the closing point of the expedition, has a fine church which, alas! has suffered acutely from a disastrous restoration so recently as 1885. Frescoes, it is true, were not destroyed as they were at Battle—though there, happily, a sketch book showing them is still preserved—but the old pews and pulpit, the two mediæval galleries and the original chancel arch were ruthlessly destroyed. One of the galleries, with a delightful oak railing recently presented by Mr. A. Gilbert Scott, has happily been opened up again, and is one of the rare examples of a musicians' gallery left in England; but before the late Mr. George Gilbert Scott made his admirable report—now reprinted as a pamphlet and sold at the church in 1874, a yet rarer thing existed. The original low chancel arch had to right and left of the entrance to the chancel two sunk recesses for nave altars, and Mr. Scott might well lament the destruction of a feature so unusual.

But what is left is of high interest, and not least for the fact that in 1709 the East End, which had become dilapidated, was rebuilt in a style which few would distinguish from genuine Early English work. It would be interesting indeed to recover the name of the architect or mason capable, in the reign of Queen Anne, of thus reproducing the style of three centuries before. There is absolutely nothing wrong about it, and it would be hard to say so much of any other eighteenth century Gothic known to the writer. To the ordinary eighteenth century architect Decorated tracery represented an overwhelming difficulty; he made the arch of the window too pointed, or else an exaggerated ogee; his tracery was either mean or heavy. In this remote Sussex church he succeeded as few nineteenth century architects even have succeeded, in doing the right thing, and such an example of successful restoration at such a date is surely worthy of record. It is not the least of our debt to the Sussex Archæological Society to have learnt that such a thing was possible. KATHLEEN ESDAILE.

Fisheries Estate.

We omitted to state in our illustrated notice of the above that the property, including the Savoy Farm, has been placed in the hands of Messrs. Alfred Savill & Sons, of 51A Lincolns Inn Fields, 7 Birchin Lane, E.C., and 69 South Audley Street, and will be sold by auction on September 22, unless disposed of previously by private treaty.

WATFORD.—The borough librarian has been asked to prepare a scheme for a branch library at North Watford.—Plans passed: 6 houses, Stratford Way, for Mr. J. A. Eldridge; 8 houses, St. Alban's Road, for Messrs. Kempster & Williams; 6 houses, Rickmansworth Road, for Mr. W. F. King; foundry, High Street, for Watford Engineering Co.

Correspondence.

Architectural Education.

To the Editor of THE ARCHITECT.

DEAR SIR,—I have read Mr. Holt's article on Architectural Education with considerable interest. Machinery has certainly had very pronounced effect upon the whole world, and very possible machinery is still in its infancy. I quite follow Mr. Holt's ideas; he would have us remember that the world is not what it used to be. That the architect of to-day is faced with altogether a different problem to that of the professional of fifty or even twenty years ago. All this is undoubtedly true, and I for myself think it is very wise to model an educational system upon lines such as Mr. Holt has suggested our architectural schools are modelled. But I would like to point out that if the whole outlook has changed and that professionals of the near future will be equipped in a far more efficient manner, it is surely necessary to amend the rules of professional etiquette; these wide thinking modern architects with super designing powers will all be out of employment unless the laws of professional etiquette are relaxed in accordance with our fast moving times. To-day we have a long list of architects who possess large and moderately large practices. Unless these men are driven out in some ruthless manner our better trained, more efficient architect will reach middle age before he can have an opportunity to make use of his talents and training, and by that time a still more efficient generation will be clamouring at his door, willing by still cruder manners to grasp his clients from him.

The schools may educate these proficient men, but who will employ them? We have a generation or two of very able designers who to-day occupy the positions of principals in our architectural offices. Are these gentlemen going to permit these splendidly trained men to oust them out of their positions? Youth can be well trained, youth should be so. But a sound training includes to my mind the capacity to face and solve the humblest as well as the greatest architectural problems. Recent exhibitions bore no evidence that students were being made acquainted with everyday architectural problems. I have no quarrel with systems which seek to elevate the mind and cultivate the taste. But nothing is so disheartening as to have spent three to six years in a college and in your first practical commission be faced with everyday problems with which you have no knowledge. Human nature is unfortunately very prone to form habits. A man who has been following the delightful exercise of designing vast conceptions is not easily contented or in a fit state to give satisfaction in connection with the preparation of a very simple drawing. After anyone has tasted the golden fruits of this life it is very difficult to accept a meaner menu. Pianists after playing for a number of years on very fine instruments find it impossible to play on ordinary everyday pianos.

The immediate period after leaving college is the most painful to all men. Most of us have to drink bitter cups; and the more brilliant the student the more bitter the disappointments. Has any student ever found a position in an architectural office where he had an immediate opportunity of showing his talents? The most of us have had to take a secondary or even lower position, many of us have had no call on our designing capacity for years. We have had to be onlookers to the production of very feeble architecture. In our spare time we have sent in competitive drawings and produced plans for cheap houses. Our competition drawings have not been successful because the assessor has not understood our ideas, they have been entirely beyond his range of vision. He has been one of those who Mr. Holt tells us "have tried"; I have no use in my office for a brilliant designer, I want a practical architect. I should welcome a brilliant man with all his modern ways, but my clients would not understand his work. Architecture is just like every other commodity subject to the conservative character of our nation. Most clients may admire fine modern drawings, but they prefer to build something they understand and can visualise.

Look at Regent Street as it is being built to-day. This is a very concrete example of the tastes of the clients. There is only one Gordon Selfridge and he has planned an American building in Oxford Street. But our traders are not used to his methods and have not been trained on the same lines; they find joy and pleasure in our new Regent Street, it is in keeping with their traditions. All professions and trades have traditions, not only architecture.

Therefore let our schools and colleges turn out brilliant practical men. Men who can find pleasure and satisfaction in designing the everyday things in architecture. The new generation must realise that clients and many hundreds of circumstances need very careful consideration and will undoubtedly demand a constant modification of their idealistic ideas. The man who is content to gradually train his clients is the man who succeeds to-day and will always succeed.—Yours faithfully,

EXPERIENCE.

Fifty Years Hence.

Fleet Street, London.
September 8, 1974.

To the Editor of THE ARCHITECT.

DEAR SIR,—Looking through some old copies of THE ARCHITECT dated 1924 I came across some articles entitled 50 years' hence which were written, I suppose, with a spirit of adventure and prophesy. I thought it might interest your readers to have their attention drawn to these articles and compare them with the events that have come to pass. The writer of those articles seems to have forgotten many points which appear to us rather strange, of which the following are only a few.

The Press and the public indifference are the two curious phenomena that mark the beginning of this century. One great daily paper seems to stand out as a patriotic disinterested organisation. Each succeeding Government were given an opportunity to fulfil their election pledges but as the majority failed hopelessly in this direction the journal referred to attacked those in office with ever increasing vigour. The other leading journals of the time appear to have followed political parties without any regard to whether their policies were sensible or otherwise. There existed a Liberal Press and Conservative journals and one or two Socialistic papers which did not greatly influence the public either way.

To-day it seems almost impossible to realise that sane individuals could year after year direct great organs of publicity on fixed political lines. The Liberal organs believed faithfully that the Liberal party leaders were the salt of the earth; they could do no wrong, regardless of the fact that the Socialistic Government of 1924 owed its position entirely to the Liberal party's support. Every man to-day is entitled to his opinion, but the Press has been obliged to recognise its main function is to distribute news and not seek to teach. To-day we think more for ourselves and have a greater interest in all things, local and national.

The other characteristic feature of that time which strikes one to-day as being so incomprehensible was the public indifference. The rule of minorities flourished nearly all through the years of drifting. At heart the nation was perfectly sound but everybody preferred rather to grumble than bestir themselves into any active civic interest. Journals announced that "The public were aroused at last." Nothing of the kind had really happened. The journals in question only desired it to be generally thought that such an event had occurred.

When some great political blunder was announced it was also stated that surely all right-minded people will protest and this thing will not be possible. Nothing ever happened. The public interest was nil outside the editorial offices of the Press. Individuals constantly grumbled but collectively nothing was ever done. To print in a journal that such and such a thing was unthinkable, impossible, etc., etc., was all journalistic hot air. It sold an edition; but no collective action ever occurred. Every individual seemed engrossed in his own immediate interests and quite unable to grasp that every Act passed in Parliament would either directly or indirectly be of interest to him sooner or later. Amongst the educated this selfish indifference was most noticeable. Every sentiment about political freedom expressed in your time was all absolute nonsense. A man might write to any of the Government offices and receive a reply that the matter would receive attention; after having waited two years he would, after much waste of time and effort, find himself in exactly the same position in which he started.

The only freedom which existed in 1924 was a freedom purchased by paying and putting up with everything and anything. The chief object of every Government seemed to be the maintenance of control over private enterprise.

Before the Great War of 1914–18 the British citizen enjoyed a freedom which no other national could pretend he possessed. In 1924 everything was changed; all the continental ideas of Government control and interference in private enterprise had been acquired and added to considerably. Politicians were busy trying to free Europe, but they had no interest in home affairs. The leaders of the Socialistic Government of 1924 were only keen on accomplishing some international success quite regardless of home interests. They seemed to wish to prove to the world at large that they had a knowledge of foreign affairs quite as good as if not better than the parties that had preceded them.

What the effect of their foreign policy had on our home industries was of no account. Instead of being great in colonisation they were engrossed in interfering in other people's business. We have never been able to comprehend why the men of 1924 desired to put Germany on her feet again, or why they so keenly desired to lend money to the Russians. Why they could not direct some of this financial support to their own countrymen as we have done is quite beyond our understanding. To-day, as you know, we possess a National Banking Corporation with a Government guarantee. Branches of this bank are in every town of any size. The manager is almost an outside traveller. His chief duty is to seek sound local investments.

It is his special business to enter into local society and watch the rising generations and if possible assist them in their business undertakings. This idea we owe to the first Socialistic Government, though it was a long time before the idea became a reality. Some few hundred thousands are lost every year but many millions are gained and youthful enterprise lives and flourishes in Britain to-day. The applications for stock and shares in this National Banking Corporation beggared description. It was as if a great wave of thankfulness and appreciation swept over the whole land. To-day the artisan with brains and ability can secure capital without the backing that was demanded in former times. The bank secures its interests in other ways. The community to-day (1974) realises that equal opportunity is always to hand for those who have the mental ability to grasp the chances that are offered them. The cry against capitalism has vanished since capital is to be had for all honest enterprise.

—Yours etc.,

ARTHUR SVENFOR.

Picturesque Villages Around Grenoble, France.

To the Editor of THE ARCHITECT.

SIR,—You give in your issue of "The Architect" of 6th inst. a view of a chateau at Vizille, from a photograph taken by Mr. H. A. J. Lamb, A.R.I.B.A., who reports that the chateau was built in 1610; enlarged in the eighteenth century, and restored in the nineteenth century. Also, over the main entrance there is an equestrian statue of Lesdiguêres. This is very interesting information, as I possess a photograph from an oil-painting of this great Frenchman. He was François de Bonne, Duc de Lesdiguères (1543—1626), and was a Constable of France, Governor of Picardy, and a great military commander.

—Yours faithfully,

18 Bellevue Road,
Kingston-on-Thames.

ANDREW SOUTH.

Books to Read.

To the Editor of THE ARCHITECT.

DEAR SIR,—Would you be so kind as to advise me in the selecting of a few books appertaining to architecture which I could read with benefit whilst waiting an appointment? As I have had no previous knowledge of this subject, they would necessarily have to be of an elementary character.

Your reply would be gratefully received.—Yours faithfully,

KENNETH P. J. DYER.

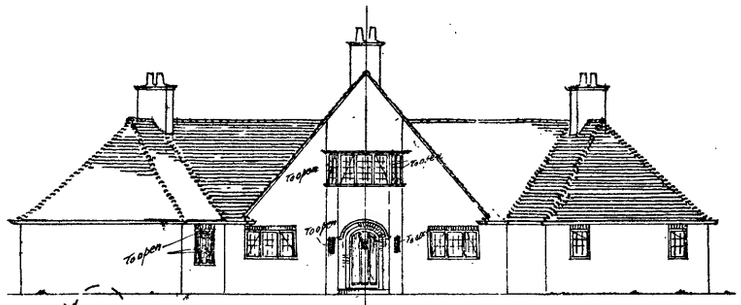
The Rosary, South Cliff Drive,
Herne Bay.

WESTMINSTER BANK, REGENT STREET. Messrs. HENRY TANNER, Architects.

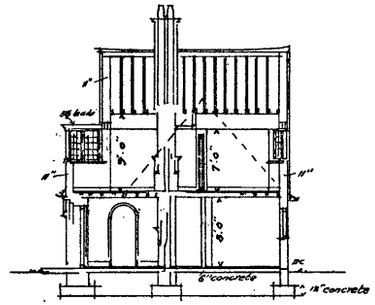
DRAWING No. 1.

PROPOSED BUNGALOW :: FULLER'S WAY, SURBITON.

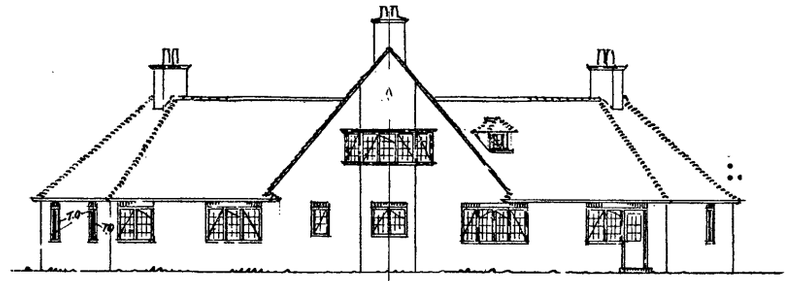
for G. H. BARTLETT Esq.



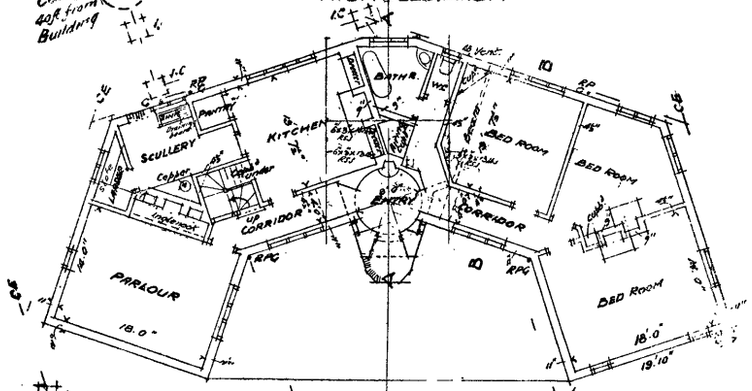
FRONT ELEVATION



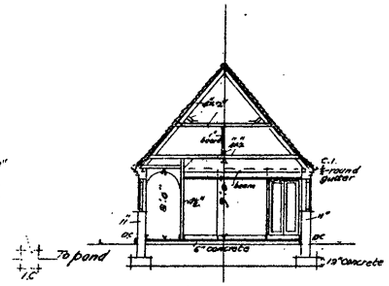
SECTION A.A.



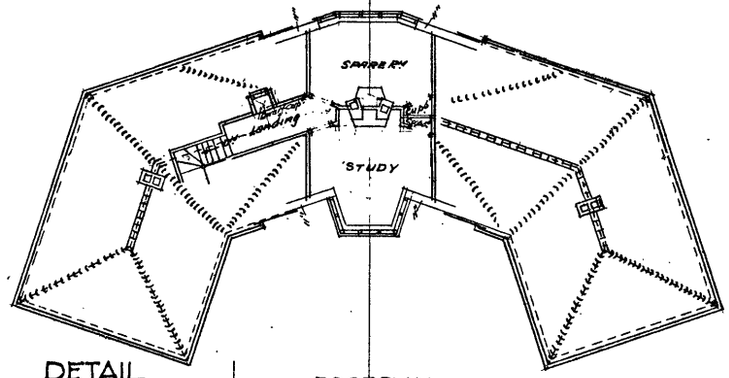
BACK ELEVATION.



GROUND PLAN.

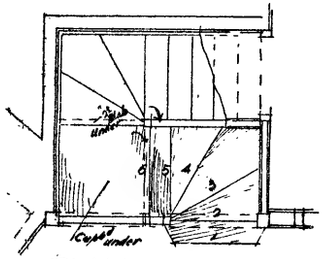


SECTION B.B.

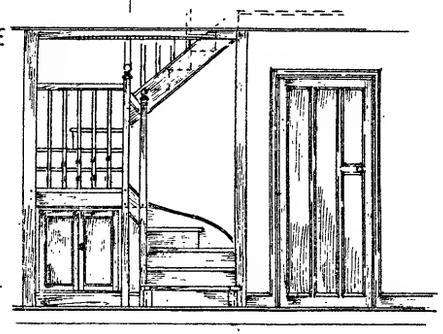


ROOF PLAN.

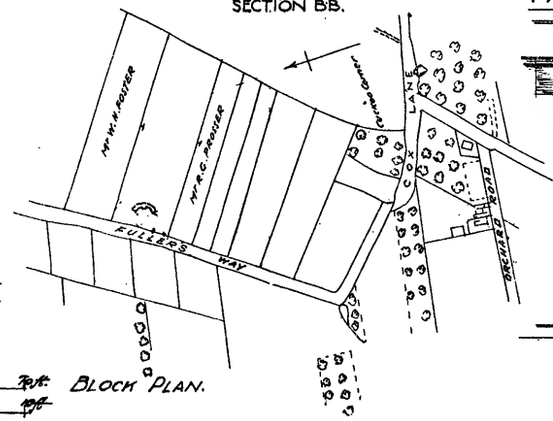
DETAIL OF STAIRS Etc



PLAN.

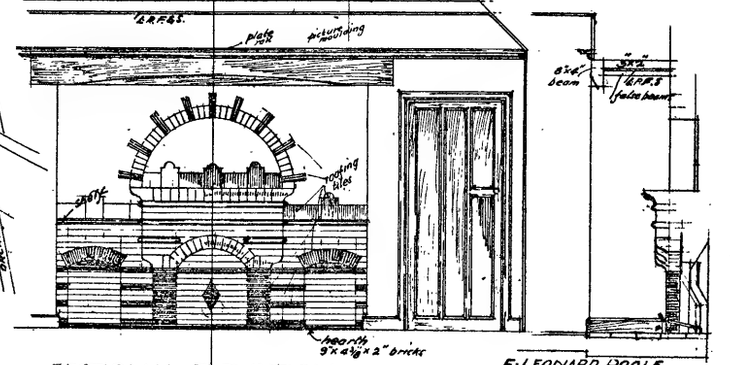


SECTIONAL ELEVATION.



BLOCK PLAN.

DETAIL PARLOUR FIREPLACE Etc.



SECTIONAL ELEVATION.

Scale for General drawings. 1/8" = 1'0"

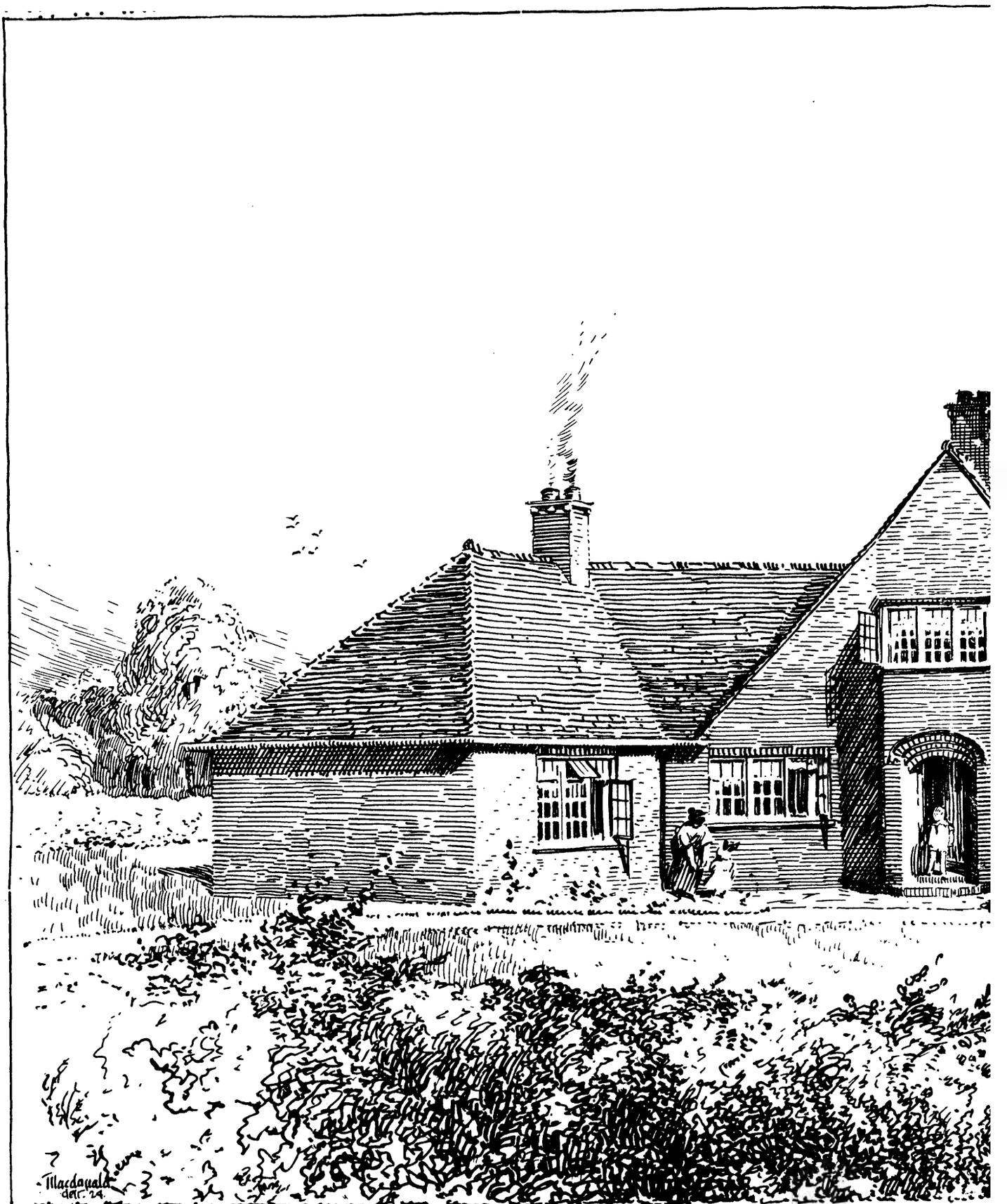
Scale for Details 1" = 1'0"

F. LEONARD POOLE
ARCHITECT & SURVEYOR,
29 NEW BRIDGE STREET,
E.C.4.

"PHOTO-LITHO" Wm BROWN & CO. LTD. LONDON, E.C.3.

PROPOSED BUNGALOW. FULLER'S WAY, SURBITON.

F. LEONARD POOLE, ARCHITECT.



BUNGALOW. FULLI

F. LEONARD P(

ON. FOR G·H·BARTLETT·ESQ.

F·LEONARD·POOLE. ARCHT
29. NEW BRIDGE ST E.C.

"PHOTO-LITHO" WM BROWN & CO LTD LONDON, E.C.3.

R'S WAY, SURBITON.

CLE, ARCHITECT.

SHOWROOMS FOR THE GAS LIGHT AND COKE COMPANY, CHURCH ST. KENSINGTON.

R.A. 1924.

SHOWROOMS FOR THE GAS LIGHT

H. AUSTEN HAL

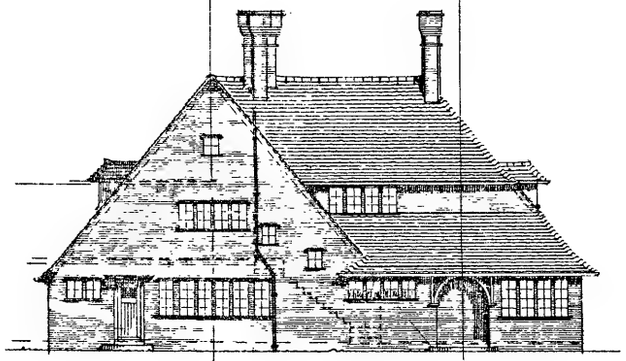
"INK-PHOTO" WM BROWN & CO. LTD. LONDON, E.C.3

T AND COKE COMPANY, KENSINGTON.

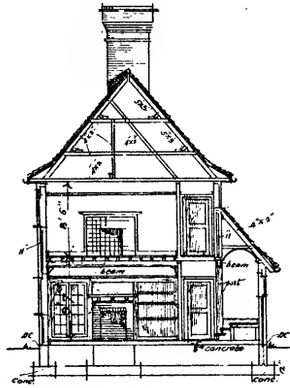
ARCHITECT.

Drawing No. 1.

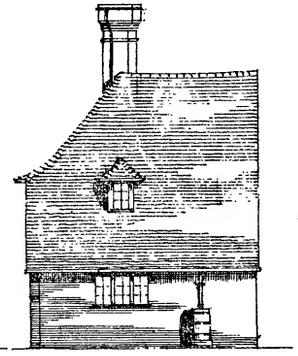
PROPOSED HOUSE - CHEAM, SURREY, FOR HENRY PRINCE Esq.



FRONT ELEVATION.

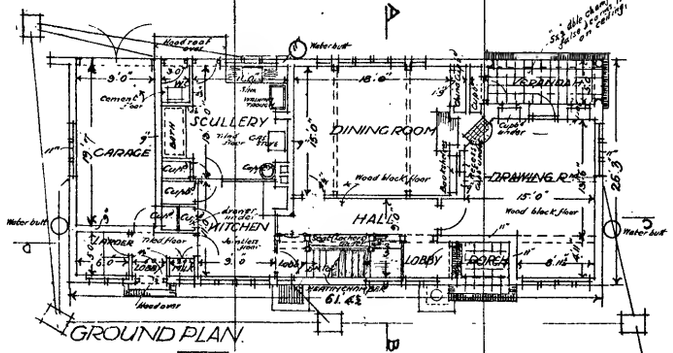


SECTION A-B.

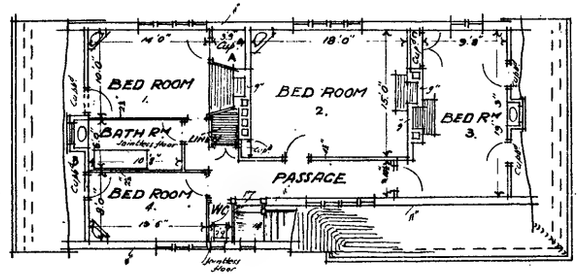


EAST ELEVATION.

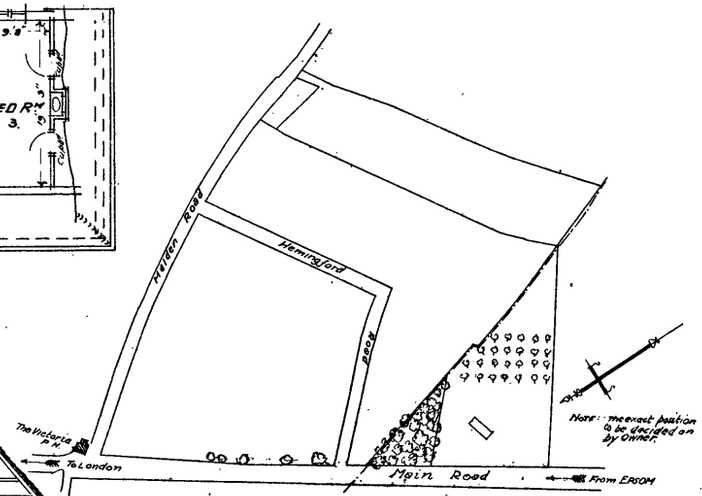
BACK ELEVATION.



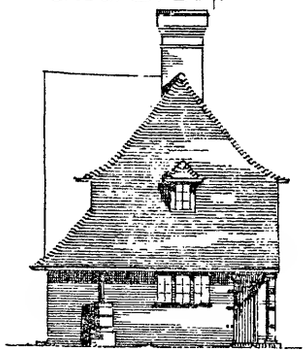
GROUND PLAN.



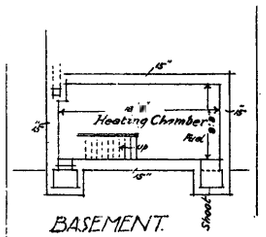
FIRST FLOOR PLAN.



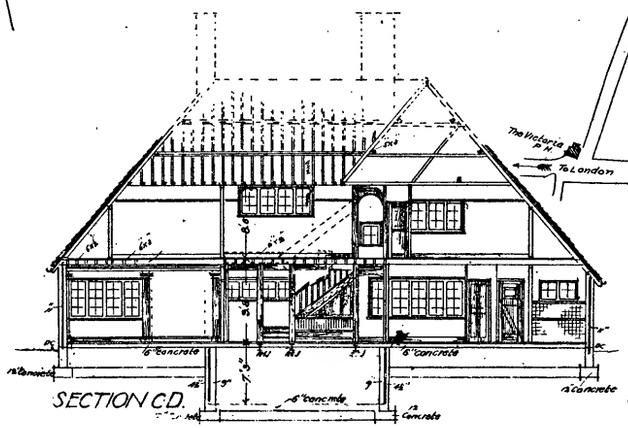
SITE PLAN.



WEST ELEVATION.



BASEMENT.



SECTION C.D.

F. LEONARD POOLE
ARCHITECT & SURVEYOR
29, NEW BRIDGE ST. E.C.4.

"PHOTO-LITHO" WM BROWN & CO. LTD. LONDON, E.C.3.

PROPOSED HOUSE. CHEAM, SURREY.

F. LEONARD POOLE, ARCHITECT.

Building Progress.

We are able to supplement this week the paragraph which appeared in our issue of July 25 last regarding the firms employed in the new premises for the Café Royal in the Quadrant, Regent Street. The following firms of sub-contractors are additional to those before noted:—Fred. Sage & Co., Ltd., for shop fronts; Comyn, Ching & Co., Ltd., for metal work; the British Reinforced Concrete Engineering Co., Ltd. For decorations, the following firms are sub-contracting:—Battiscombe & Harris, Ltd.; Bromsgrove Guild, Ltd.; Hampton & Sons, Ltd.; Harrods, Ltd.; Sidney Laughton; H. H. Martyn & Co., Ltd.; Robersons, Ltd.; P. Turpin; and Baguès, Ltd.

Messrs. Wilson & Gill, of Goldsmith's House, Regent Street, London, are having their premises rebuilt from the designs of the architects, Messrs. Yates, Cook & Darbyshire; the general contractors are Hall, Beddall & Co., Ltd., and Diespeker & Co. are carrying out the constructional floors (presumably their Big Span Patent); the steelwork is in the hands of Dorman, Long & Co., Ltd.; and Mumford, Bailey & Preston are installing the heating.

Doubtless presently we shall be able to notice further buildings in this important thoroughfare of the metropolis; meanwhile we may draw attention to a large block in its rear, in Warwick Street and Golden Square, with F. D. Huntingdon as general contractor; Dorman, Long & Co., Ltd., for steelwork, and Diespeker & Co. for the Big Span Fireproof floor construction. This is an important stone-faced mammoth block.

The Throat Hospital in Golden Square is also receiving an extension, which is being constructed by Messrs. Prestige & Co., Ltd.

Messrs. T. H. Kingerlee & Sons are engaged upon a block of offices on the opposite side of Golden Square (No. 9), showing a stone-faced facade and a metal inset for three storeys for the casements and interspaces. The block consists of ground, first, and four other storeys.

The important block, No. 66, Cannon Street, London, is now in the process of being rebuilt for Messrs. Guest, Keen & Nettlefold, Ltd. The general contractors are Messrs. Grigg & Son, and Messrs. John Daymond & Son are doing any required carving, though with a generally cemented facade there will not be much of such work. The premises consist of ground, first, and four other storeys. Metal casements are being introduced throughout.

In High Holborn, Nos. 268–270, we recently observed a stone-fronted block, disposed upon five storeys; it possesses the merit, not always conspicuous, of being expressive of its purpose. The design is a variety of quiet Renaissance. The building is arranged as a ground floor shop premises, with office accommodation over. Mr. O. C. Summers has carried out the central heating.

Messrs. Gordon & Gotch is another firm having business premises rebuilt, these being situated in Farringdon Street, Nos. 74–79. Messrs. G. E. Wallis & Sons, Ltd., are the general contractors; Messrs. H. Young & Co., Ltd., are supplying the steelwork, the demolition and excavations being in the hands of Messrs. H. Sabey & Co.

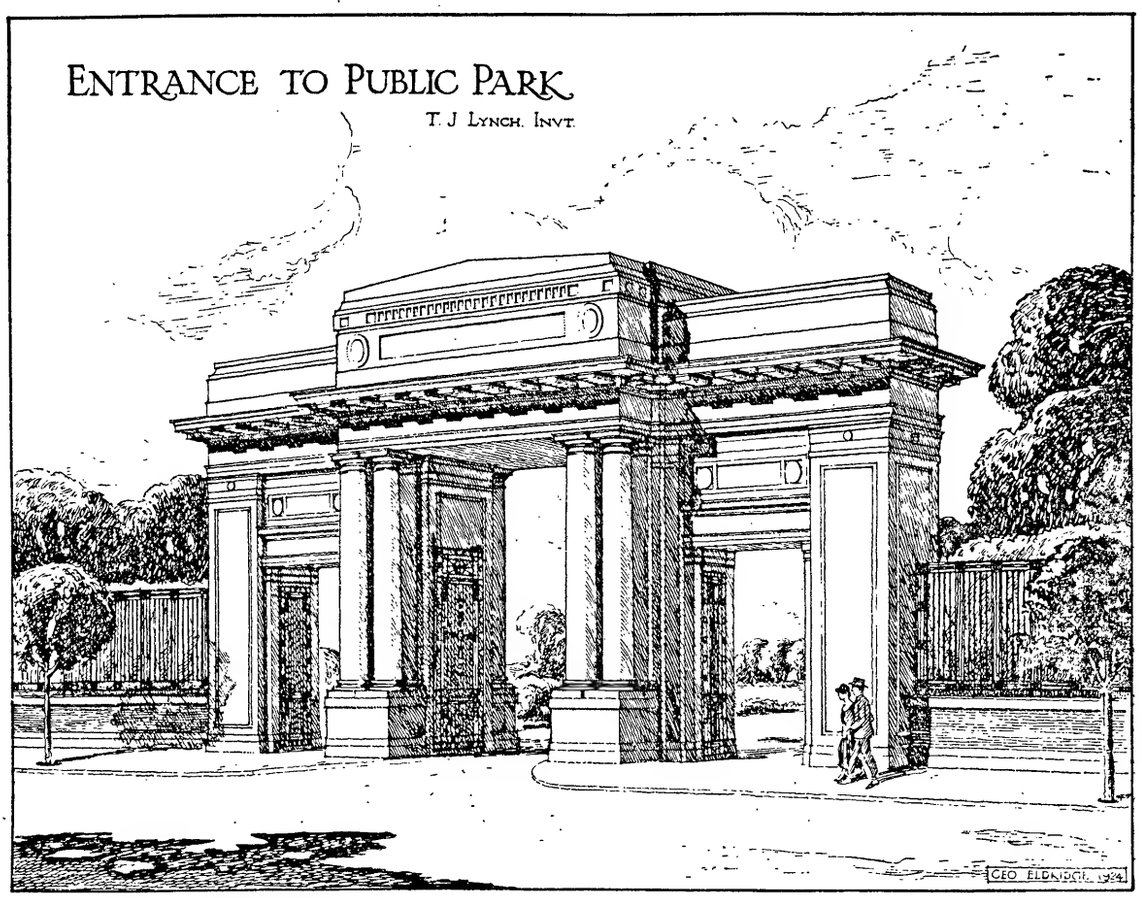
In Victoria Road, Surbiton, near the railway station, we recently noticed two sites upon which the builders are getting busy, or preparing so to do. One of these is receiving the new premises of the Westminster Bank, Ltd., in place of the pre-existing block. The new building should prove of great interest, with its fairly elaborated stone facade, and the banking hall in the rear with its steel-trussed roof. Messrs. F. & H. F. Higgs, Ltd., are the general contractors.

The other site in Victoria Road, Surbiton, is to receive lock-up shops and flats, and these will be erected by Messrs. Ide & Son.

Messrs. Kirby & Williams are engaged upon the extension of Haidée's premises, on the site of No. 5, Wardour Street, London.

Amongst other firms employed upon the new Criterion buildings, forming the first reconstructed portion for the Piccadilly Square to-be, we notice the Kleine Patent floors, and for wood-block the Acme Flooring & Paving Co. (1904), Ltd.

The last buildings we shall notice to-day are those in Oxendon Street, Haymarket, London, being the extension of the Comedy Restaurant; the contractors are Messrs. Webster & Cannon (Mr. Frank R. Cannon). It consists of two main storeys and one in the roof. The facade is in Carrara (or similar) ware; though, as a rule, blue is a difficult and unsatisfying colour to manage on exteriors, yet the purple blue used for the lettering proves quite effective.



ENTRANCE TO PUBLIC PARK. T. J. LYNCH, Architect.

Architecture as a Commodity.

By William Roger Greeley, A.I.A.

From "The American Architect," August, 1924.

In the May issue of a certain architectural journal there was published an article entitled "Salesmanship in Architectural Practice." This article throws much light upon the architect's hidden sources of genius. It explains that the "architect is constantly exercising creative genius, the results of which must be 'sold' to others." It states that "his interest lies in the fields of creative effort, and his rôle is that of originator and salesman of architectural products." Originator and salesman! It goes on to say: "It is as much an architect's business to know how to promote and finance a project and to consider actively the means of doing this as it is for him to know how to use mosaic tile intelligently!" The article then rises to its climax in its definition of salesmanship. "When one individual endeavours to influence another to adopt a certain mental attitude, or to act in a certain way, he is practising salesmanship." This is interesting doctrine, and is sufficiently prevalent in the business atmosphere of to-day to merit more than passing comment.

The emphasis that is being put on salesmanship must have its effect upon the quality of every business and profession. If we can convince the man who has services to render that what he needs to be proficient in is salesmanship, and that good salesmanship will result in prosperity for him, then, by inference, we have admitted that excellence in the quality of the service is not the only thing required for success, and further, that it is not really required at all. Average quality, plus more than average salesmanship, spells success.

This is good doctrine in that it is measurably true, but it is the doctrine of decadence nevertheless. It is the same principle that has governed the conduct of the labour unions and has levelled the mechanic to a dull average of skill and output. Looked at critically, it is the principle of getting on, rather than of service. The emphasis is on persuading the prospective purchaser to buy a measurably good service and not upon improving to the limit of excellence the quality of the service.

The result will, of course, be poorer and poorer service and better and better salesmanship, until we reach in professional fields the *ne plus ultra* of business success—quantity production and sale of the product which is just good enough to enable skilful salesmen to put it across.

This doctrine is too practical to be dismissed with irony or deprecation. It is the besetting temptation of the professional man. He realises that if he will he can sell his birthright for a mess of pottage. He realises that some of his competitors will actually do this and that their action will tend to make his pathway thorny. All that he will have left to depend upon is an intelligent and discriminating clientele. It may be a dwindling clientele or it may not, according as people are educated to be thoughtful and discerning.

A public that chooses its professional men by the noise they make in their own behalf will soon have no professional men worth choosing. If this public goes to the Canvasback Portrait Company, Inc., to sit for its portrait instead of to Sargent, because the former house employs better salesmanship, it will fool no one but itself. If it buys a book to read because the book is widely advertised, it will waste only its own time. If it hires a minister because of his persuasiveness, it will hire him only to fire him.

If the public wants to have good service it can get it in one way, and only in one way—by discriminating between good and bad service and patronising the good—and that doesn't involve salesmanship, except that salesmanship is bound to confuse the issue. If it didn't confuse it, it wouldn't be good salesmanship. Salesmanship is good only when it is successful in selling. The public is prone to mistake good salesmanship for good service, and hence confusion must result.

Now to return to the "article." What is salesmanship? If one is practising salesmanship whenever "he endeavours to influence another to adopt a certain mental attitude or to act in a certain way" then hypnotism is the most effective kind of salesmanship. This is probably the case. The current methods in advertising are coming to be recognised as hypnotic in their effect. The mind succumbs to the oft repeated and, in fact, endless iteration and reiteration of an alleged fact.

According to the same definition of salesmanship, you are a salesman when you are proposing marriage, although you are not selling anything, and the woman is not buying anything if she accepts. She is giving herself up and binding herself to be loyal and true to you. To call this salesmanship is profanity and bad English.

By the same token, a teacher who is trying to make the pupils behave is a salesman, and if he is a salesman when he is training a philosopher or a bricklayer or an athlete, why isn't he a salesman when he is training a seal to do arithmetic, or a donkey not to balk? If we are to throw away the dictionary and make a new language we can call salesmanship "any use of the human mind or will power that affects the conduct of another mind or will power."

Let us, however, sober down and admit that salesmanship is an English word defined as "the art of selling." "Sell" has two meanings. The first is "to transfer to another for an equivalent." It is correlative to "buy." The second is "to impose upon; to trick; to deceive." Salesmen may use it in the first sense on others after having applied it in the second to themselves.

Buying and selling constitute a very small part of the activity of human beings in influencing each other's minds. If you get a doctor out of bed at two a.m. to see if your child has the measles, the doctor is not selling you anything. If you send for an accommodator to come out and cook a meal, the accommodator isn't a salesman or saleswoman. When you pay a conductor, the conductor is not a salesman. When you go to the village undertaker he does not become a salesman. Nothing is shallower than the remark that "everyone is a salesman." Very few of the "working classes," so-called, can be salesmen.

Under what conditions is salesmanship an advantage to the prospective builder?

Where production is insufficient to supply the market salesmanship is not required. Where production exceeds the normal demand salesmanship is needed to secure the sale of the commodity, both by increasing the demand and by outstripping competitors. During the influenza epidemic the temptation for the doctors to advertise was absent. Their commodity was too much in demand already, so that they all but wore themselves out trying to meet it. Time was when doctors were largely bent on bleeding their patients and the public held medicine in derision; some advertised, and so the patent medicine business was evolved; but the real medicine men have struck to their last and have won confidence. To-day they occupy a firmly established place in the community which could not be strengthened by any personal use of advertising matter or salesmanship. Such a programme would, on the contrary, shake the people's trust in doctors.

A salesman who finds it necessary to dwell on his own ability is already a dead one.

He who emphasises his rival's shortcomings is almost equally feeble.

The constructive presentation of the goods to be sold is the one line to be followed.

The architect has only his own services to sell. He does not sell plans. That is left to the ladies' periodicals and others. What can a man say about his own services? That he is willing to put them at your disposal is a foregone conclusion. That he thinks his services to be the best is almost equally certain. That he exists at all may not, however, be known. Here is the chance. He may insert

No. 6

SOLIGNUM EXHIBITION NEWS

September, 1924

Model Working Dairy treated with Solignum.

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a card in the local paper stating that he exists, is an architect, and is doing business at a certain address. But this "ad" the classified telephone list already supplies without apparent protest from ethical experts. Perhaps there is one other thing that he may permit himself to divulge to the eager public—namely, what he has done. To point to his record is legitimate. "So-and-so, Architect, 160, Fifth Avenue, New York. The following buildings are among his works: Item, item, item, etc." The adoption of this method would mean a display of many columns of names and buildings, some well known, some unknown. The names alone, however, would soon prove wholly inadequate to give an idea of the character of the work. Illustrations must follow. This is expensive advertising. Only a few are left in the race. If it proves successful, however, the business man enters the field. He incorporates, hires an "architect" as a member of his organization, and advertises on the strength of this architect's record. If the record is a meagre one photography may fail. Drawings, however, can be made to prove anything. Enter another element—the smart draughtsman.

Soon this latter combination of shrewd business acumen and pretty picture making wins the advertising race and the business corporation gets the work and begins to hire architects to do it. By this gradual commercialising of the profession we have put the business side of it in the hands of business men, and the architects are doing the designing and making the drawings. There is some degree of propriety in such a division, except that the commercial tail wags the professional dog.

The transformation could be pictured as "Tiffanising" architecture. It is the difference between hiring your sculptor to design your monument or going to the "Monument Works" opposite the cemetery entrance and having something done to order. The latter appeals to the American idea of efficiency and service. Its success is absolutely guaranteed by the result as seen in our cemeteries.

With a degree of common sense and dignity, which some among the architects could emulate, the sculptors are refraining from advertising their ability to do gravestones. They are not clamouring that the stonecutter is usurping their field. They have better things to do.

The painters are apparently able to contemplate without too much panic the advent of the poster industry. We have not heard them bewailing their fate that people do not recognise in them the true profession through which posters should be done.

Yet there are architects who view with concern the increasing usefulness of the engineer in building enterprises. To be an engineer is not necessarily a disgrace. Leonardo da Vinci was an engineer. So, too, Roebling. That an engineer should be employed to design a furniture warehouse does not necessarily mean that architecture is on the wane in America. Fifty years ago we had no architects. Then came a feeble few, groping. Now there are many architects, and strong ones, not groping, but carrying forward a noble standard bravely. The public has discovered this. It has recognised merit where merit existed and entrusts to the architect the bulk of its most serious difficulties. Architecture, instead of being on the wane, is on the increase. No other fact could account for the action of engineers and business men in assuming to be architects. They are too canny to accept a disguise that will injury them. Imitation is the sincerest flattery. Now, if architects follow suit by pretending to be engineers and by adopting the purely commercial methods of business men, the rule will operate in reverse and the architect will throw away the distinction that was his.

The pocket-book side of the profession is important, but will not furnish a basis for professional existence. The commodities which architects have to sell are training, taste, imagination, and ability. The fruit of that ability is not invisible as in the case of a lawyer. It stands foursquare, ready to be inspected by all. Under present conditions of professional conduct the man who executes his first commission carefully, intelligently and with taste, will go on to larger opportunities, but under a regime of advertising no man would have a chance except by the liberal expenditure of capital used in celebrating what he considers to be his ability. All would have to assume the new burden of advertising. Here would be another case of keeping up with Lizzie!

Let us look at it from the client's point of view. What does he gain and what does he lose? This, after all, is the important question. The architect exists to perform a service. How will this service be affected by advertising and salesmanship?

First, the cost to the client will be increased, for the client must pay for the advertising in the end. It will be charged into the architect's overhead and passed on to the client.

Second, the selection of a good architect will be more difficult. The advertisement is essentially a form of special pleading and to that extent is unreliable, especially as compared with the present practice of picking an architect on his visible record.

Third, the letting loose of a new horde of solicitors will form but one more aggravating burden on the already irritated public. The insurance agent, the book agent, the bond salesman, and the architect's "drummer." Behold the advance agents of civilisation!

What is left for the rest of us? We can only plug away and keep up our courage by reciting to ourselves.

Leicester and Housing.

A building exhibition is to be held in Leicester in October, and most of the available space has already been booked. The authorities and the architectural profession of this very important Midland town are keenly interested, and the promoter informs us that the success of the undertaking is fully assured. The Leicester Housing Authority have taken space and will exhibit plans, specifications, etc., of their municipal schemes. The Architectural Association of Leicestershire are supporting the exhibition and also the District Building Trades Employers' Association. We are informed that a few spaces in the hall can still be obtained, but early application for space must be made to ensure allotment.

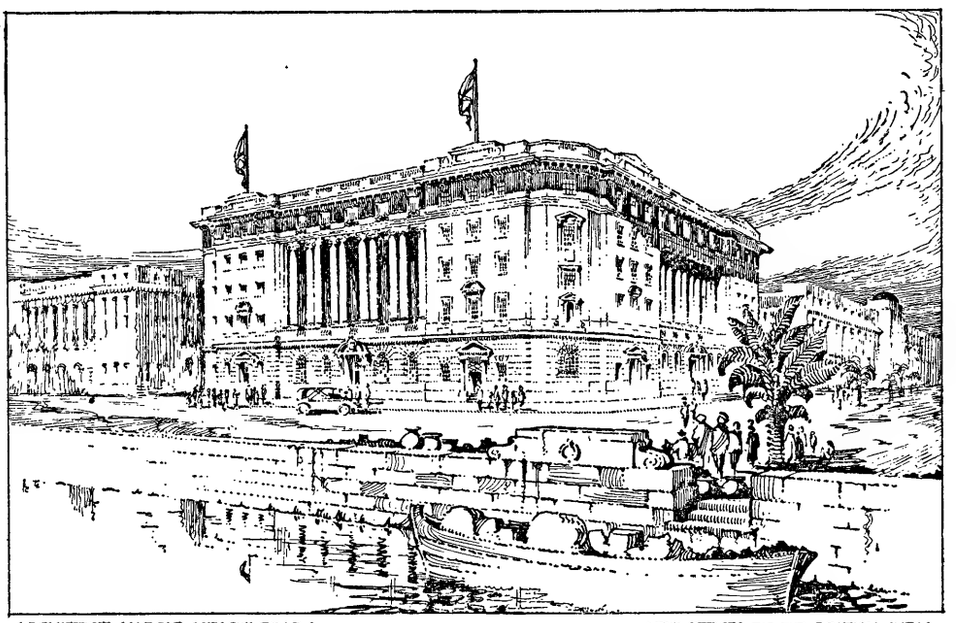
A considerable number of concrete building methods will be demonstrated at the exhibition and also labour-saving devices. Leicester, by its geographical position, is an important centre, and we are informed that the building industries of the district are keenly looking forward to this, their first, exhibition.

The Junior Training Halls are the latest and most up-to-date halls in Leicester and easily reached, and as this is to be purely a technical exhibition, and all side shows and amusements rigidly excluded, it can readily be understood that the visitors will be entirely those who are really interested in building construction, and not the ordinary sightseer. It is a business exhibition for business men. The opening will be on Thursday, October 16, and daily to October 25.

Sanitary Appliances.

Messrs. Thomas Crapper & Co., Ltd., the well-known sanitary engineers, of 120 Kings Road, Chelsea, London, S.W., forward us their latest catalogue. This old-established firm who have held for so many years a well-deserved reputation for their sanitary work and also the Royal Warrant, have their works, offices and showrooms at the above address, which are conveniently situated close to Sloane Square Station. We gave an illustrated notice of their very compact new showrooms last year. The catalogue consists of 179 pages, with an inset of 13 pages of price lists for the trade; 170 pages are profusely illustrated with excellent blocks, showing the many appliances supplied. The whole work is clearly and plainly printed on good paper and bound in red cloth. Messrs. Crapper have specialised in baths, lavatory basins, wash down closets, urinals and water waste-preventing flushing cisterns, and numerous examples are shown of the firm's patents. The name of Thomas Crapper & Co. and the success attained has been built up on a reputation of personal service of the members of the firm, whether carried on purely as a private business or under the family arrangement of a limited liability company, and that personal service is continued to this day. The firm supply anything and everything in connection with sanitary appliances. A copy of this catalogue can be obtained on application.

BRISTOL.—Plots at £3 15s. a year are to be leased for 999 years to Mr. G. Sanders for the erection of 16 houses; Mr. Oaten, on behalf of G.W.R. employees, for 16 houses; Messrs. Poole and Son for 12 houses; Mr. J. Curle for 18 houses; Mr. W. Churchill for one house; and Mr. G. Cork for one house.



·ARCHITECT·· HAROLD SCIDLOW·F.R.I.B.A.
·CONSULTING ENGINEERS·· READE·JACKSON & PARRY·

·NEW OFFICES FOR THE BRITISH·INDIA·
·STEAM NAVIGATION Co.y CALCUTTA·

THE new offices of the British India Steam Navigation Company will occupy a commanding site in Calcutta. The whole of the Steelwork (3,290 tons) is being rolled and fabricated by Dorman Long & Company at their works at Middlesbrough.

The position of these Steelworks on the banks of the River Tees facilitates export. Erection in India is undertaken by the company's associated company there, Braithwaite & Co., Engineers, Ltd.

Stand No. 43, (designed by Sir Edwin Lutyens, R.A). Palace of Engineering at Wembley.

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L.W

General News.

ADELAIDE.—The Temperance and General Mutual Life Assurance Society proposes to erect offices at the corner of King William Street and Grenfell Street.

AUDENSHAW.—A scheme for a new secondary school for Audenshaw, Denton and Droylsden is proposed.

BARNSLEY.—The Housing Committee recommends the purchase of 21 acres at Ardsley and two acres at Carlton Lane for housing schemes. Mr. Charles Smith, the contractor for the Ardsley scheme, is to be asked to submit a price for the erection of 90 additional houses, and Messrs. Fairhurst Bros. to quote a price for erecting 30 houses.—The Housing Committee recommends acceptance of the offer of the U.K.H. Syndicate, Ltd., to erect 50 cottages of type " A " in pairs, according to the Borough Engineer's plan at £670 per pair, the houses to be completed within ten months.—The Library Committee are in communication with the Carnegie Trust regarding a grant towards the cost of a new library.

BASINGSTOKE.—Plans passed: Bulk spirit depot at G.W.R. goods yard for Shell-Mex Ltd.

BRADFORD.—The Ministry of Transport have sanctioned a loan of £14,589 for the reconstruction of the tramway track in Halifax Road.—The Electricity Commissioners have sanctioned loans of £130,000 for mains and services, and £20,000 for a sub-station.—Estate development schemes as follows have been sanctioned: Coniston Grove, for Mr. C. Dennison; Hayworth Road for Mr. J. Gray; North Road, Wisbey, for Mr. A. E. Akeroid; Stoney Lane, for Eccleshill Workmen's Club; Lister Avenue, for Mr. S. Webster; Mayo Avenue, for Mr. T. Hoare; Wyke Lane for Mr. J. Sharpe; Toller Lane, for Mr. W. Rawnsley; Norman Avenue, for Mr. J. H. Smith, Wheatlands Crescent. The subsidy has been promised in respect of 10 houses in Highfield Avenue for Mr. Albert Robinson of Woodbine Works.

BURTON-ON-TRENT.—The Corporation propose to erect houses on the Wellington Street site, houses to be according to the Corporation's own plans and specifications and not to come within the Government's subsidy scheme.

CARLISLE.—The designs for the St. Nicholas bridges have been approved by the L.M.S. engineers. Meanwhile the surveyor is to advertise for tenders for the construction of new masonry and concrete retaining walls and the necessary filling to form the new approach.—Plans passed: Grand stand, Warwick Road, for Mr. H. E. Scarborough, architect, for Carlisle Rugby Football Club; new out-patients' department, Cumberland Infirmary, for Mr. S. W. B. Jack, architect.

CHADDERTON.—A proposal for a new secondary school is being considered.

CHIPPING SODBURY.—A town planning scheme is to be prepared by the Rural District Council consisting mainly of the parish of Filton.

COVENTRY.—The City Council proposes to create £250,000 5 per cent. stock for the purpose of street improvement schemes.

DUDLEY.—It is proposed to purchase 18 acres at Netherton for a housing site.—Plans passed: rebuilding the Three Crowns Inn, Starrord Street, for Messrs. J. Hanson & Son, warehouse, Wellington Road, for Messrs. Raybould Whitehouse & Co., Ltd.

GLASGOW.—80 houses are to be erected at Kelvingdale Road for Messrs. William Wilkie & Co., Ltd.

LEEDS.—The Ministry of Health have sanctioned the scheme for the adaptation of premises in Alexander Street for art gallery and library purposes at a cost of £4,700.—The Council are to borrow £19,000 for the construction of a section of the Ring Road from Tongue Lane to Smithy Mills Lane, including the provision of a surface water sewer.—Sanction is to be sought for a loan of £24,000 for the purchase of land required in connection with the construction of the Middleton light railway and for a highways depot.—The Ministry of Health have sanctioned the purchase of Chapeltown barracks at a cost of £12,120. A new road is proposed from Roundhay Road to Chapeltown Road through the barracks site.—The Health Committee is to seek an alternative site for a sanatorium.—Plans have been prepared for a golf course at Meanwood.—Plans have been passed for the lay-out of the Kirkstall estate by Messrs. Hill and Sons.—It is proposed to widen Whitehall Road, Farnley, to 100 feet.—Land is to be scheduled in the Gledhow Valley town planned area for open spaces.—Land at Beeston is to be acquired for a recreation ground. Land is to be purchased in Roman Avenue for street improvements.—The City Engineer has been authorised to report as to additional sites for housing purposes.—The City Engineer has prepared plans in connection with the extension of the art gallery into the premises acquired from Edmondson's Warehouse, Ltd.—Tenders are to be obtained for the installation of an aeration and filtration plant, the provision of slipper and Russian baths, and the alteration and erection of necessary buildings at Meanwood Road baths. Tenders are also to be obtained for the following works at the Meanwood Road baths:—Re-lining and making watertight large swimming bath, new calorifier with connections, copper piping for hot and cold water service and installation of electric light.

MALDEN (SURREY).—The surveyor has submitted to the Malden and Coombe Urban District Council plans of the proposed war memorial and lay-out of the site in front of the Council offices.—The Council are to seek sanction to include 8 houses at Idiston Square for Messrs. Leather & Sons.

MANCHESTER.—The Corporation Town Planning Committee have passed plans as follows: 20 houses Egerton Road, motor bus depot Parr's Wood Lane, Didsbury, street plan Rectory Avenue, Didsbury Park estate, 40 houses Crossley Road, Burnage.

NEWPORT (I.O.W.).—The Board of Trade has consented to the erection of the proposed new swing bridge at the entrance to the town quay.—The Corporation proposes to seek the Provisional Order necessary to carry out the scheme for the removal of the cattle market, now in St. James's Square, to another site.—Plans passed: for office in Trafalgar Road, for Mr. S. E. Tomkins, architect.

OTLEY.—The Urban District Council have passed plans submitted by Messrs. J. Tetley & Son for alterations at the following licensed houses: Royal White Horse, Black Bull, Bay Horse, Red Lion, Queen's Head and Half Moon.

OXFORD.—The City Council have decided to invite tenders for the erection of six huts for emergency housing purposes in the playground at Ferry Hinksey.—The City Council are supporting the proposal regarding the provision of a tuberculosis sanatorium at Manor House, Headington.—The city surveyor has been authorised to restore the old Rewley Abbey water gate.—Plans passed: hostel, Benson Place, for Lady Margaret Hall, rebuilding the Albion public house, Hollybush Row, for the Lion Brewery, addition to University Museum, South Parks Road, for University Chest, addition to Rose & Crown, North Parade, for Halls Oxford Brewery, Ltd.

PLYMOUTH.—The Council have had sanction to borrow £8,906 for the purchase of land for an elementary school and £1,130 for the purchase of land for the extension of the technical school.—The Mental Hospital Committee are negotiating for land for the erection of additional accommodation.

SALFORD.—The Corporation Baths Committee recommends the appointment of Mr. Charles Swain, 12 Exchange Street, Manchester, as architect and quantity surveyor, in connection with the proposed erection of baths and washhouse at Hodge Lane.

STALYBRIDGE.—The Education Committee have decided to purchase a site near Grey Street for a new elementary school.

STRETFORD.—Terms have now been agreed to in connection with the construction of Park Road and Davyhulme Road East, and the bridge across the Bridgwater Canal. The estimated cost totals £47,000.—It is proposed to establish an open-air school in Longfield Park.—Plans passed: 26 houses, Erlington Avenue, for Mr. D. Gosling; sewering, etc., road to Turn Bridge, for Trafford Park Estates, Ltd.; warehouse extensions, Trafford Park Road, for Liverpool Warehousing Co., Ltd.; retort house Longford Road, for Stratford Gas Board; billiard hall, Broady Street, for Mr. J. T. Jones; 4 houses, St. John's Road, for Mr. T. Hames.

TUTBURY.—The Rural District Council propose the extension of the sewer in Branston Road in consequence of building operations.

WOODFORD.—The Urban District Council have passed plans as follows: 4 houses, King's Avenue, extention of Beechcroft Hall, house, Hora Lane.

YORK.—The City Council are considering the purchase of premises in St. Saviourgate for housing purposes.—The following schemes have been decided upon: construction of bathing pool at Pond Garth at a cost of £1,659.—Plans passed: alterations and additions Coach & Horses Hotel, Nessgate, for John Smith's Brewery Co., Ltd.; extension to chapel, the Mount, for St. Stephen's Orphanage.

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LYONS FAIR. EXHIBITION BUILDING.

A French Exhibition.

The Lyons Fair was conceived during the Great War, the promoters' objects being to promote French trade by the institution of an exhibition which would offer the advantages and opportunities given by the Leipzig Fair, and to achieve for France and her Allies the object arrived at in Germany by its policy of attracting European buyers to a centre of general trade. Unlike the British Empire Exhibition at Wembley, the Fair is to be a permanent feature in which there will be two yearly exhibitions, one every spring and another in the autumn. The Palais de la Foire de Lyon is now about one-third completed, and will ultimately house the whole of the Fair and will contain 5,000 stalls. The estimated cost of the whole will be over 100,000,000 francs, or something like £1,500,000. It is therefore a scheme of the first size and importance. It consists of a number of pavilions extending over a length of nearly a mile along the banks of the Rhône, with a central hall of some 20 yards in width.

LYONS FAIR. EXTERIOR VIEW.

The 5,000 stalls of the Palace will be constructed of panelled oak with oak parquet flooring and plate glass fronts, and these stalls are to be uniform throughout in order to obviate unfair competition, while privacy is ensured. Each stallholder's name will be displayed in uniform lettering, which will be regulated by the management, the result being, as the views we give show, to give it an appearance of dignity and order, which we associate rather with a museum than in an exhibition. Here, we observe, our neighbours set an example which we might do well to follow. Our exhibition buildings are too often advertisements in themselves, and advertisements which often detract the attention away from what is shown rather than

LYONS FAIR. EXHIBITION GALLERY.

enable customers to concentrate it on the exhibits which form the *raison d'être* of an exhibition.

At Lyons, on the other hand, we have a severely simple and practical building which is dignified because of its simplicity and directness of purpose. The elevational treatment is not a grandiose effect, but an unaffected expression of treatment.

The close similarity in the design of the pavilions gives the whole group a suitable character; there is no attempt to glorify or accentuate one portion of the group to give it an outward appearance or the ambitions suitable to a public building; it is suitable because we feel there is no artificial or forced climax.

The rents of the various stalls depend on their position—wooden stands of 4 metres square, 1,100 francs; reinforced concrete stands, 3.20 by 5.17 metres, 1,200 francs; stands in the Palace, 3.50 by 4.50 metres, 1,600 francs; and free standing stands at the rate of 16 francs per square metre. Lighting is provided by the promoters, heating by means of radiators or petrol stoves, for which additional charges are made. Gas and water are also to be supplied to the various stalls on payment. Goods from abroad are admitted free of duty, provided they are dispatched back to their destination.

We are glad to be able to give these particulars of what we believe to be one of the best organised exhibitions which has been instituted, and one which is apparently free from any attempt to attract those in search of amusement. The Fair is obviously meant to serve the ends of business men, and to do so in the simplest and least distracting manner.

As the views show, it is wholly free from that appearance of vulgarity which often seems inseparable from buildings of this nature. It is also obviously economical to make permanent provision for what seems to be a modern want instead of squandering money on temporary buildings as we usually do here. The exhibition is a great group of shops to be occupied year by year by those manufacturers and merchants who wish buyers to see what they have to offer.

LYONS FAIR. AUTOMOBILE HALL.

Our Illustrations.

SLOAN TELEPHONE EXCHANGE. JOHN H. MARKHAM, Architect.

DETAIL OF ENTRANCE OF SLOAN TELEPHONE EXCHANGE. JOHN H. MARKHAM ARCHITECT.

DOORWAY FROM CLERMONT FERRAND, 1557. Drawn and measured by G. STANLEY HARRISON.

Notes and Comments.

Electioneering!

The prospective Labour candidate for Central Southwark said, in an address: "While a man is paying three shillings a week so that his family might live in a gravel pit under some rags, a child cinema star has a suite of twelve rooms in one of the best hotels in London." Doubtless this is meant to arouse indignation, but we do not know why it should. The child cinema star very likely was born in just such conditions as mentioned, but because of his ability or looks in the end obtained his present position. The State does not help to keep him. Instead of this, he probably has to pay a large amount of income-tax, while the films on which he appears form part of the entertainment of audiences largely composed of the working classes themselves. He would not receive a large salary if a profit could not be made out of employing him, and we think Mr. Harry Day might find something better to say to his would-be constituents than such a rhodomontade of folly as his statements suggest. Possibly the man who lives under the distressing circumstances mentioned will not work to better his conditions, and if so we need not be over sad about his present condition.

Dear Labour.

A Perthshire contemporary, after alluding to the well-known fact that materials cost only some 80 per cent. more than in 1914—a sum which it might be added is partially made up of labour charges, goes on to say:—

> The operatives are making certain demands, and the employers are ready with certain concessions. But they, and the general public for whom they are custodians, and who want cheap houses, are naturally asking what is to be the practical outcome of any such readjustment. It is a fact beyond dispute that at present, with labour, more than with any other factor in the building industry, lies the duty and the responsibility of bringing down costs.
>
> The skilled bricklayer, working a 44-hour week, earns £3 13s. 4d. in London, and £3 17s. in Liverpool, compared with something like £3, the weekly wage of a coal-hewer. And the Liverpool bricklayers are asking for no less than 6d. an hour more! Any increase upon these wages, and any concession for "wet" time (which has already been calculated in fixing the rates quoted), without abandonment on the part of the workers of systematic or unintentional "slacking," would be merely a new imposition upon the industry and the community, in which the building trade operatives would themselves be among the sufferers.
>
> For a vicious circle surrounds industry. Slack labour spells fewer houses, as well as dearer houses and higher rents, which in turn call for higher wages on the part of the occupants, in order that those higher rents may be paid. And higher wages in other industries send up the price of commodities which the occupants of those houses produce, and which, in order to live, the builders and their families must buy.
>
> These are facts so trite that repetition seems almost stupid. It is, however, obvious that at present, building trade operatives do not realise their significance, and still more obvious that until they do—until they are ready to give a fair day's work for a fair day's pay—the building industry can neither prosper to its fullest capacity nor fulfil its obligations to the community.

We are glad to see these points emphasised in the Press, as they cannot be too well known.

Why Sleep?

A medical correspondent of the "Daily Express" alludes to an important discovery which aims at abolishing "tiredness," enabling men to work all day and still be fresh to go on playing football for hours without fatigue, to work at a factory all day and need no rest afterwards, and, in fact, to be able to work like a strong machine. We are told that the experiments made have been on small animals alone, but have proved entirely satisfactory with rats and guinea pigs. The root idea is to provide a substance which absorbs or neutralises the poison given off in exercise which in the end produces the sense of fatigue, the process being likened to the clogging of a chimney with the products of combustion.

We may add that such a discovery sounds to us too good to be true, but if it should happen we may have to revise our methods of life, sleeping once or twice a week, if as much, and getting through a comfortable 16 hours working day. But the reported discovery will at least afford amusement, even for the sceptical.

The Professional Classes Council.

The Annual Report of the Professional Classes Council has been sent to us. Since 1914 it has dealt with 12,000 applications for help, providing a maternity home for the wives of professional men, educational assistance to 900 children, while it helped professional musicians by arranging over 4,000 concerts in camps, hospitals and factories, and did a great deal of other useful work. The organisation was first formed during the war to deal with hardships arising out of it, but in 1920 it was resolved that the Council should be carried on, as applications prove there is permanent need for the Council's work.

The President is the Rt. Hon. Lord Phillimore and the Chairman Major Leonard Darwin, while the patrons include the Archbishop of Canterbury, the Cardinal Archbishop of Westminster and the Lord Mayor. Subscriptions should be sent to the Secretary, 251 Brompton Road, S.W.3, and we are sure many will be glad to support so useful and necessary an institution.

Working Time.

Commenting on the hours difficulty in Scotland and certain areas in England, Mr. Richard Coppock, secretary of the Operatives' National Federation, at Hull, yesterday, stated to a Press representative:—

"The great error the employers have fallen into is that Clause 3 of the Agreement provides that the difficulties shall be settled in accordance with the circular of June 16.

"While placing the entire responsibility on the circular letter, they have failed to realise that it only sets out the *modus operandi*.

"The whole question of hours is based upon the clause, which provides that, should there be a failure to settle the question of working hours in the summer, forty-six and a half shall become operative from the commencement of the official Summer Time, 1925.

"The employers' threats of a lock-out can have no avail, in view of the fact that the provisions of the agreement do not permit a strike of builders on the question of hours at this juncture."

We do not think Mr. Coppock is right in his contention, as we read the arbitrators' award carefully and nothing seemed clearer than the fact that a definite working time was settled for summer months exceeding that of winter time by 2½ hours. In any case, we should like Mr. Coppock to tell us whether, apart from any question of agreement, the proposal is not an essentially reasonable one.

Responsibility and Politics.

We hear that in America it has been said that engineers might with great advantage take a more prominent position in public life. "Engineering," in commenting on this, says that the engineer's disability is that he has been accustomed to have to guarantee results, which renders him less pliable than the politicians.

The failure of the Tay Bridge ruined the professional reputation of Sir Thomas Bouch and probably contri-

buted to his early death, while the politicians who imposed on London a tramway service which will involve a contribution of £360,000 from the rates in the coming year, did not suffer, in spite of the fact that they had secured the adoption of their scheme by promises of a handsome surplus of revenue. No engineer dare trifle with natural laws in the same manner that the Government of the day did with its principles when the Trades Disputes Bill was under discussion. The whole of the engineer's training tends to deprive him of the necessary pliability which enables him to skate over the thin ice of his own mistakes.

We believe these comments are abundantly justified, while they may be taken as applicable in a large measure to the architect's position. We do not feel the desire expressed by many to see a few architects in Parliament, as under present conditions they could achieve little or nothing.

OLD PANELLING FROM SOHO SQUARE, W.C.

Book Notes.

"The Stones of Stonehenge." By E. Herbert Stone, F.S.A. (London: Robert Scott. Price, one guinea.).

Anyone dealing with the subject of the genesis of certain forms of architecture or construction would do so with a diffidence, directly commensurate with the study he had already accorded to it. As a rule, it is only the ignorant who are dogmatic. But whilst allowing the justice of this statement, there is something to be said possibly in extenuation of an ignoramus' assertiveness, and this may be expressed by the following plea that the ignoramus might urge: "Where we find the cognoscenti opposing one another, surely I have as much right and reason to express further diverse views, as they possess."

But let that pass, and let us here and now, whilst disclaiming any personal association with Stonehenge or with Druidical art at all, offer some remarks upon the subject, and more particularly in relation to Mr. E. Herbert Stone's interesting monograph, which at this present moment lies before us.

Mr. Stone does not depend entirely upon the views of previous workers in the field (for he lives in the district and has made a close personal study of the ruins), but like a proper searcher after Truth, he gives credit, where he considers it to be due, and is not afraid to differ, where he regards dissent as being justified.

He refers frequently to John Aubrey, Inigo Jones, William Stukeley, Waltire, Flinders Petrie, Norman Lockyer and other modern and less modern investigators, but Godfrey Higgins is only once mentioned. In fact, Mr. Higgins seems to have had a high reputation in the first half of the nineteenth century, and his views as to the family association of the Celtic Druids with an almost (if not quite) archaic race of Eastern Europe, deserves recording, thus linking together Stonehenge, Avebury and the architecture of the Pelasgians (or Cyclopeans): it may be added that as the latter were ophiolaters, a further connection with Avebury (Abury) is thus suggested. Speculation has naturally been rife upon the subject; and even as the Arctic and Antarctic expeditions have lost something of their glory since the extreme Poles have been reached, so, too, would investigation in regard to Stonehenge suffer, if exact data as to its origin were once established. But this is highly improbable.

Mr. Stone endeavours to weigh the opinions of the contending "authorities," who agreed that the date of Stonehenge lay

somewhere between the years 1800 and 400 B.C.—a sufficiently wide margin, in very truth. Were an architect to say that Sancta Sofia, Constantinople, had been erected some time between the date of the foundation of Rome and the reign of Charlemagne (a period which approximates as to length), his credit would suffer. Of course the contention might be raised that there is historical record as to the date of the church, but that is beside the point. In 1901, however, the accuracy of the above agreement was contested independently by Sir Norman Lockyer and Professor William Gowland, who, antedated Stonehenge by another possible 200 years earlier than 1800 B.C.; in Part II, Mr. Stone discusses at sufficient length the arguments for and against the views of various archæologists; his is not to be described as a judgment of Solomon, for the application of the principle of bisection would have resulted in the date 1200 B.C., whereas Mr. Stone is satisfied to vote in favour of about 2000 B.C., near the close of the Neolithic Period.

When we leave the region of speculation and deal with ascertainable facts, the value of the author's labours becomes more apparent, and the evidence of his careful research and his minute attention to detail are particularly satisfying, especially when we contrast them with the lack of these qualities in some other works submitted to our searchlight.

Mr. Stone refers to the "entasis" of the stones; to an architect, the use of this word in such a connection does not appear justified, for its accepted connotation is that of a mathematical refinement to correct an optical illusion, and this is not the case at Stonehenge; nor does the author's assertion on pages 4 and 11, as to the working of an entasis accord with his remarks on page 81 as to the dressing of the stones.

Reverting to the speculative aspect in relation to Stonehenge, the long-contested question as to its orientation is of interest, though impossible of solution. Are we justified in supposing, that the builders of Stonehenge decided uncounted years beforehand, that in such and such a year they would erect a monument, whose axis should be determined by some astronomical phase, which they would in the meantime study year by year? And furthermore, the building of such a structure would doubtless occupy years in its accomplishment; we have no record of inexhaustible slave labour in England in those days, and we *do* know that tools and implements of the day did not lend themselves to rapid labour, and these facts and hypotheses militate against the astronomical theory, though it would be impertinent to negative its impossibility.

We would like to suggest to the author that if the astronomical theory is correct, it may well be that the Heel Stone was one of a pair, axially disposed as a mason's guide in setting out the work, together with a similarly disposed pair nearer the circles, of which the so-called "slaughter stone" alone exists in evidence. Draughtsmen know, that *two* separated points may fail to ensure accuracy of direction, but three will ensure such accuracy. And the Heel Stone is about as distant from the "slaughter-stone," as the latter is from the sarsen circle.

In fine, we think, that upon all the speculative points, the only sensible conclusion is that of Mr. Stone (see page 33, in his remark as to the purpose of Stonehenge): "All we can say with certainty is: We do not know."

Good and Bad Manners in Architecture.*

This is a reprint in book form of essays by the author published in various magazines subsequent to his first book "The Things Which are Seen." We agree with many of the points the author makes, but feel that his writing is marred by the intolerance of a bigot who is not satisfied without ostracising everything he does not himself like.

His altogether extravagant praise of old Regent Street and his equally extravagant condemnation of Shaw's work are cases in point.

We agree that old Regent Street—unfortunately much cut up and marred long before the bulk of it was demolished—was a pleasant street with some pleasantly designed features. Nash certainly contrived to give a good deal of variety to the design of a long street without destroying the general harmony of the composition, but we are inclined to deny *in toto* Mr. Edwards's claims. It was not and could not be said to be more than a pleasing harmony in a minor key, a thing to be appreciated certainly, but not in any way a masterpiece to be extolled.

Given a similar opportunity by the Crown authorities as that Nash had, there are many architects who would have been fully capable of designing as satisfactory a street composition as old Regent Street. To be quite specific, we may mention Professor Richardson and Mr. Stanley Adshead, both architects who have given special study to the work of the Regency Period. All that need have been done by the Crown was to impose one elevation on the leaseholders throughout Regent Street, and to have fixed a reasonable height of, we may say, 15 feet higher than the old buildings. Had something on these lines been done, we do not think we should have reason to regret the disappearance of Nash's work.

As for material, without wishing to cavil at small points, we should say that stucco should neither be condemned or praised. It is absurd to condemn Nash because old Regent Street was carried out in stucco. The fashion of an age demanded classical ornament and forms, conditions of economy prevented those forms being carried out in stone. The alternative brick was out of favour, and stucco fronts were preferred. We admit Mr. Edwards's contention that painted stucco lights up well at night, but equally we should claim that it is natural and proper in another age to prefer the use of materials which do not need the application of paint. It is true that plastering may be as great a craft as bricklaying, it is equally obvious that for external use we should prefer the employment of a material which does not require the application of paint. There remain stone and brick, the latter being the traditional craft material of the greater part of England. Why should not the Crown have insisted on a brick Regent Street instead of one faced with Portland stone? Brickwork is beautiful if rightly used, whether it becomes blackened by smoke or retains its original tints in a clearer atmosphere. Brick and not stone is the proper solution for London buildings, with or without stone dressings. Again we dissent from the author's condemnation of Shaw's fine work in the quadrant. Had this design been carried out on both sides of the quadrant and continued up Regent Street, we should have possessed the finest street in Europe. The complaints of shopkeepers as to the limitation of window surface would have died away had the whole street been subjected to the same conditions. Shop fronts might be severely limited if over large areas the same treatment were demanded for similar purposes, the axiom of equal opportunity only has to be considered. The shopkeeper in a section of the quadrant might well grumble were he allowed less space for display than his immediate neighbours, but if all were treated alike, his ground of complaint would not exist.

We agree that the new scale of heights is less pleasant than the old, but no one acting as advisers for the hotel would have advised their curtailment. It fell to the advisers of the Crown to set the limit, and if they have acted inadvisedly, the fault is not that of the owners of the property or their architects.

Shaw's problem was defined, and all we can fairly criticise is the manner in which he solved the only task he was free to deal with. We hold he solved it in a masterly manner considering the nature of the problem set and the prevalent architectural tradition of the time. Of Shaw it may be said his mistakes were greater than the achievements of many of his detractors.

We agree in the main with Mr. Edwards's regret at the colossal scale of Bush House, which certainly does dwarf that of many public buildings, but we dissent from him and from other critics in considering the architectural treatment adopted as being successful. We condemn it architecturally as being a very mediocre achievement, having the outward form of a great American building without the architectural quality which usually marks the latter.

In his disparaging notice of the New County Hall, the author is neither just nor reasonable, and displays a quality of dogmatism which detracts from much that is good and reasonable in a readable and useful book.

If we do not beware of theory, it may very readily become a tyrannical master, and we fear Mr. Trystan Edwards has allowed himself to be dominated by the fascinating thought that he has discovered a solution which will resolve all architectural difficulties.

D.

* "Good and Bad Manners in Architecture," by Trystan Edwards. London: Philip Allan & Co., Quality Court, Chancery Lane. 6s. net.

FIRST STATE.

SECOND STATE.

OLD COURTYARD, BURFORD, GLOS. Illustrating How to Etch by J. R. HUTCHINSON.

How to Etch.

J. R. Hutchinson.

A BIT OF OLD WARWICK. J. R. HUTCHINSON.

In my previous article on etching we left off with the "plate" in its "first state," that is, when the etching ground is cleaned off the plate; we now proceed to examine the plate and see what wants doing to it. Generally I find it lacks contrast, the lights being too dark in some parts and the darks not dark enough in others.

Now to remedy these defects we must do two things: Use a burnisher to make some of the lines finer where they are too dark. You must get a burnisher from the firm of Roberson, of Long Acre, London, W.C., or from Rhind, of 69 Gloucester Road, Regent's Park, London, N.W. The burnisher is a very hard steel instrument, and with it you rub hard over the lines you want "reducing," and this brings them closer together, and therefore finer, and if you rub some fine emery powder and oil on a bit of cotton wool into the lines, you can judge pretty well what the lines look like during the process. If the lines want a good deal of reducing, you must use the "scraper," which is a sharp three-sided instrument, and with it you scrape the surface of the lines you want "reducing," and then you finish up by using the burnisher over them so as to get a smooth surface on the copper.

Now we will proceed to darken the lines that are not deep enough, and lack vigour, and to do this we must lay a ground all over the plate, and one that will be strong enough to protect the "work" that you do not want touched up, from the acid you use for the biting on work. The ground that I have found suits me best for this purpose is paraffin wax, and I use it in this way. I warm, or heat, my copper plate over the gas burner or stove. I use a "Beatrice" paraffin stove, and, with a lump of paraffin wax, I rub it all over the plate, and well into the lines. Having done that, raise the plate and drain off the paraffin wax, letting it run off at one of the corners of the plate, and, when it has all run off, take it to a basin of water and pour cold water on the back of the plate. In this way you get a better surface to the paraffin wax, quite smooth and a dead surface that does not shine. Now, if you look at your copper plate you can see all your work perfectly clear, and the ground will protect all the parts you want protected; but to enable you to see any lines you want to draw on the plate, I find it best to darken all the surface by painting over it with a sable brush, of a flat kind, with your stopping-out varnish, for which I recommend Rhind's, of Gloucester Road. Paint it over as thin as you can, as you can then see your lines on the copper plate quite clearly. The great advantage of painting it over with the stopping-out varnish is that it protects the deeper lines from any danger of foul biting, as the edges of the deeper lines I find are so easily attacked by the acid when "biting in" is being done; but I find that when protected in this way they are quite safe.

Now we will begin to attack those lines in your plate that want to be deeper and stronger; and, to do this, you, with your etching needle, go over and into those lines; you re-needle them and take out the wax that is in them, and so let the acid attack them and rebite them. Now the best and safest acid to use for this purpose is the Dutch mordant bath; I gave the formula for it in my previous article. It is as follows:—4 oz. hydrochloric acid, 1 oz. chlorate of potash, and 20 oz. of water, melting the potash first in warm water, and then adding the acid. You can rebite for 10, 15 and 20 or 30 minutes, as you may require for what you want, "stopping out" you work as usual in stages. There is another way of regrounding your plate, which is by using the ordinary etching ground. You heat your plate and rub the etching ground well into the lines, then finishing with the dabber to make it smooth all over. But I have so often found that the acid in rebiting attacks the edges of the deeper lines and so mars their crispness, so that I have always kept to the paraffin wax.

Having done the rebiting required, the plate is now ready for the printing stage, and I will now describe the process. I think it is most important that every etcher should print his own plate, as he alone knows just what he wants doing to the plate to bring out the special points of it. If he lives in London, let him take the plate to a good printer, and there are several: Goulding, of Netherwood Place, Shepherd's Bush, is perhaps the best one, or Brookes, of 78, Margaret Street, W., is another good one. Go there and see the printer at work, and you will learn more in an hour than the books can tell you, but I will describe the process in detail as far as I can. First come the inks they use, which are Frankfort black, burnt umber and burnt sienna, all in powders. These they grind up on a stone slab with a muller, mixed with burnt oil till it is a fairly thick consistency, like a paste. The ink is then spread all over the plate with a dabber, going well into the lines, using a rocking motion, the plate being all this time on a hot iron plate called the jigger. It is then transferred on to a wooden table, next to and level with the jigger, and the ink is now wiped off the surface of the plate with a very open kind of coarse muslin, or canvas as they call it, using a circular motion with the hand.

You will now see what your proof will look like, but the next stage of printing will bring a very much richer and stronger effect to the proof, and this is called the "drag" process, and it consists in dragging some very fine muslin (butter muslin is what I use, and get it from the drapers) all over the dark parts that you want to emphasise, and in this way you get a velvety softness, so beloved of etchers. I have given in my article two illustrations of Kenilworth Castle, one showing the state of the plate before the drag process, and another showing the state of the plate after the "drag," and you will see what a very much richer and stronger effect the proof shows. After the dragging has been done, the margins of the plate are wiped with whitening on a bit of rag, and the plate is now ready to go through the printing press. Probably the first proof will be disappointing; it will look less finished than you thought, and some of the work not so fine as it looked on the plate,

SECOND STATE.

FIRST STATE.

A BIT OF KENILWORTH CASTLE. Illustrating how to Etch by J. R. Hutchinson.

but all this can be remedied by reducing the parts with your burnisher, and making other parts stronger so as to give more contrast, which is generally wanting.

The other illustration (Old Courtyard, Burford) that I have given in two stages shows an etching combined with aquatint, which I find very promising, as you can get a still richer effect and something after a mezzotint quality. One illustration shows the state of the plate before the aquatint work was added to it, and the other after the aquatint work was added to it, and I think that you get more quality into the work and more mystery as well, which gives charm to the work.

I hope to write one more article on the subject of aquatint, with illustrations to explain the process, as I think it is peculiarly suited for architectural work.

The etching of the bit of old Warwick is just a pure etching of line work only, with the " drag " used in printing it.

For any who may care to take to etching after reading my articles I can recommend a very useful little handbook, which will be of great practical use to them. It is called " Etching," by G. Wooliscroft Rhead, and is published by Wells, Gardner, Darton & Co., of 2 Paternoster Buildings, London, E.C.

The Art Galleries.

The Arlington Gallery, 22 Old Bond Street, have arranged an Exhibition of about 82 pictures by Christiaan Pieter Snyders. The artist has included within the scope of the exhibition views from Holland, Belgium, Algiers and Tunis. Taken as a whole the exhibition contains very few pictures that do not charm and delight the eye. Vigour and good drawing combined with bright colours make all the pictures very attractive.

The day for laborious draughtsmanship is past. The public no longer appreciates the desire on the part of the artist to depict carefully every detail. They resent the attitude which artists in the past so frequently assumed that they, the public, possessed no imagination. To-day the public have a great deal more imagination than either artists or architects give them credit for. The practice of both these arts would be a far greater pleasure to their exponents if they credited the public as being educated and appreciative of their best efforts. Mr. Snyder must have realised that the public desire brightness and sunlight in their lives, for many of his pictures exhibited in the Gallery would considerably brighten the dullest of our homes.

No. 3 Gate in the Beguinage, Bruges, is a fine example of the artist's talent. No. 7, " The Cabbage Garden," is truly charming; the colouring leaves one without words wherewith to express the delight one so sincerely feels. The title might convey the impression that the artist had attempted to depict cabbages. They are present in the composition, but merely contribute a purple tone to the foreground.

The collection does, of course, contain attempts at a dramatic rendering. Nos. 12 and 20, both titled " The Ardennes," are intended to convey a certain tragic impression. The artist does not seem to us to be quite so happy in rendering the wilder elements of nature as he is when illustrating sunlight. He might be advised to leave this subject to the hundreds of artists who in no sense of the word share his ability to render light and brightness of atmosphere in their pictures.

We would advise him to cultivate a simpler taste in frames. Many of his effects have not been improved by the frames, and when we look at the whole exhibition the ornamental frames worry and irritate.

The Gas Industry in Conference.

The thirteenth annual conference of the British Commercial Gas Association is to be held in Liverpool under the presidency of Alderman H. Wade Deacon, C.B.E., J.P., on Monday, Tuesday and Wednesday, September 29 and 30 and October 1.

The speakers at the Public Conference on October 1 will include the Bishop of Liverpool, Dr. A. A. David, who will deliver an address on " The Worker and his Work "—human relations in an industrial age—and Sir Lawrence Weaver, K.B.E., Director of United Kingdom Exhibits at the British Empire Exhibition, who is to speak on " Art in Industry "—the influence of beauty in industry and commerce.

Correspondence

[The Editor will not be responsible for the opinions expressed by Correspondents.]

Cheaper Building.

To the Editor of THE ARCHITECT.

SIR,—In your issue of the 12th inst you comment on the inclusion of Mr. Coppock amongst the members of the new Committee that has been appointed by the Minister of Health to " enquire and report as to new materials and methods of construction." This you describe as a little amusing. To me, in these days, when the education of the architect is so much to the fore, there does not seem anything amusing in the matter. To be candid, I must confess I resent your comment. And why ?

The subject of enquiry is of a highly specialised nature involving a knowledge not only of building construction, but of cheap methods of building construction. What would you have in the constitution of such a Committee, but members whose established reputation for learning and research in building construction pre-eminently entitles them to a place on such a Committee ?

In that you consider Mr. Coppock's inclusion as amusing, I find no offence, as I consider him an eminently suitable person to serve, but that you should have signalled him out from amongst such a galaxy of talent as is represented by the names of those others also chosen, I feel is a little invidious. Taking the list as the representatives of the profession, we see the energies of our old-fashioned friends of Conduit Street in obtaining the recognition of those whose impassioned interest on behalf of their brother professionals will be universally acknowledged.

For Labour we have not only Mr. Coppock, but also Mr. George Hicks, whose celebrated declaration that 300 bricks per day is the extreme limit reasonable to expect from a fully grown man will be recollected and should proved useful in this highly specialised matter.

On behalf of the Building Employers, all who know them will agree that the choice could not have fallen on more experienced nor more highly trained specialists in economic house building than Messrs. W. H. Nicholls and A. G. White, the Chairman of the Allied Building Trades Employers and Secretary of the Master Builders Federation, respectively. Both institutions are, as will be well known, interested primarily in the study of economics as applied to building.

Yours, etc.,
H. BRYANT NEWBOLD,
Author of " House and Cottage Construction."

Chantrey Cottage, Hatfield,
September 15, 1924.

The Wider Outlook.

To the Editor of THE ARCHITECT.

DEAR SIR,—Recently THE ARCHITECT has published notes and short articles which have touched on the greater things in life than the immediate interests of the architectural profession. I, for one, welcome this effort on your part. Formerly it might have been out of place, but to-day every political move has an almost direct influence on architecture.

Formerly the Government of this country left matters connected with private enterprise alone. To-day we are ruled and governed in almost every sphere of our activities.

Under such circumstances your attitude towards the changed conditions is both correct and helpful.

Either of these proposed loans to Germany or Russia will affect the architectural profession very keenly. We need every penny of our capital invested in home industries which will be productive of building enterprise.

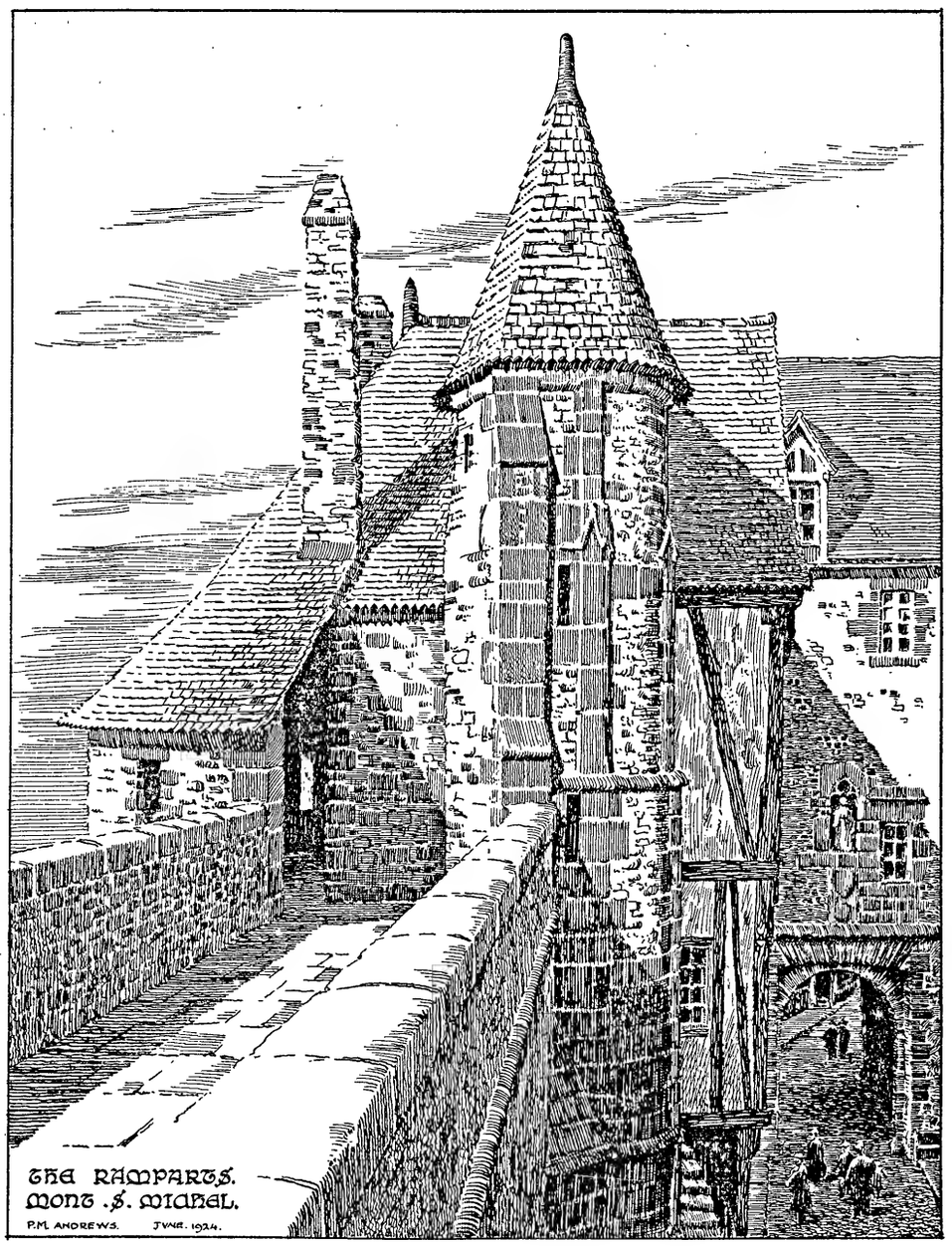
Capital invested abroad is not productive of home enterprise. These financial issues will possibly be very attractive, but, quite apart from whether they are sound investments, the loss of the capital invested will be very much felt in this country.

Why cannot our Government guarantee some big home enterprise which would reduce our unemployment and awaken considerable trade activities ? The professional Press is read by members of the public who, for the most part, possess thoughtful and constructive minds. Many of your readers are in close touch with big development schemes and ideas which for the lack of finance and public knowledge are left untouched and unnoticed. Encouragement, fresh energy and enterprise, may possibly spur on these men to renewed efforts which will lead to ultimate success. I welcome the fact that THE ARCHITECT has taken an interest in the greater things of life, which to-day undoubtedly touch the individual vitally.—Yours, etc.,

PHILISTINE.

The Defences of Mont S. Michel.

By P. M. Andrews, A.R.I.B.A.



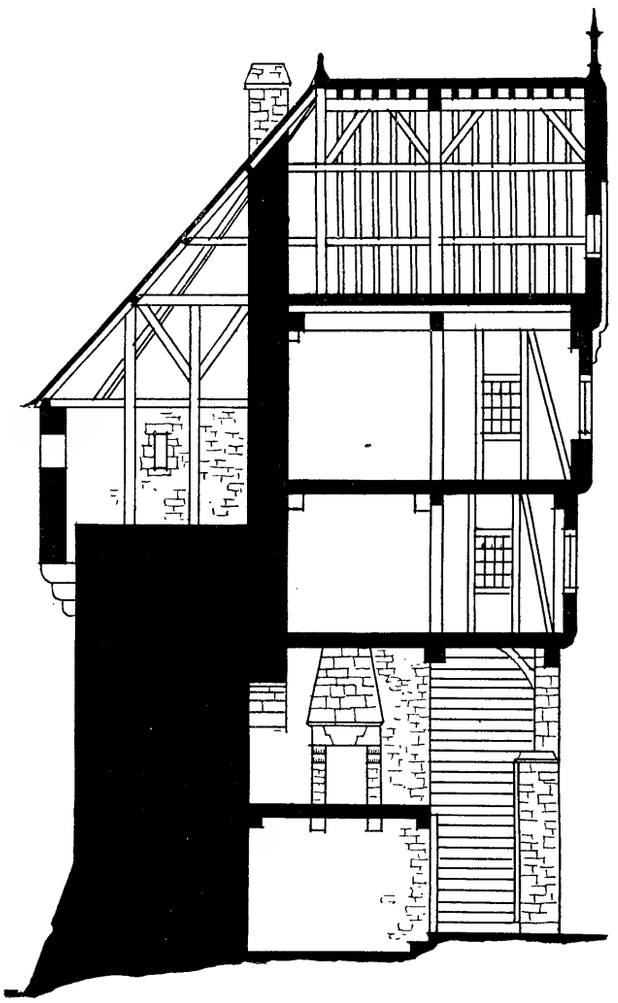
Not the least interesting of the varied wonders on the Mont S. Michel are the secular fortifications. The Mount is inaccessible on its northern slopes—that is, the side exposed to the open sea, and Nature here has provided the rock with sufficient protection without it being necessary to add further impediments. At the summit, or just below, the monks in the thirteenth and fourteenth centuries constructed a defensive system of walls and angle towers, more in the nature of enclosing walls, and were not built with a view to resisting any serious form of attack.

It was not till the fifteenth century and the persistent attacks of the English on the French coast during the Hundred Years' War that it became necessary to increase the fortifications and provide defences for the lower part of the Mount, and for the small town which by that time had sprung up along the southern side. These defences were entirely distinct from the earlier monastic walls, and were only connected with the latter on the north-east and north-west angles where the old abbey walls descended to the sea level.

It was the Abbot Robert Jolivet who first conceived the idea of girdling the base of the rock with an enceinte wall, and his project was to extend from the Tour Nord at the north-eastern corner, along the eastern and southern faces to the Tour du Roi, which still forms the entrance to the town. Going west from this point, the steep declivity of the rock renders further defence at this level unnecessary until the fourteenth century Tour des Famils is reached. Here additional defensive works were contrived to protect its southern side. Finally, the Tour Gabrielle was built at the northern extremity, linking up with the earlier monastic wall which at this point ascends the rock till it almost reaches the square enclosure at the west end of the Abbey Church. Thus a complete defensive scheme was planned, encircling the east, south and west faces, and giving protection to those sides exposed to an attack from the land, and where the nature of the ground rendered such an attack possible.

The work was begun in 1417, and continued under the direct supervision of the Abbot till 1420. Having with considerable structural skill laid the plans for the fortification of the Mount, Jolivet then played the traitor and sold himself to the English at Rouen, thus giving his services to the very enemy his schemes were intended to frustrate. The price of his treason is reputed to have been one thousand livres. He must have been a remarkably valuable man.

The Abbot's defection in no way retarded the work on the walls. His prior Jean Gonnault was appointed Vicar-General the same year, and the work was continued and finished five years later. These were critical days for the



SECTION THROUGH TOUR NEUVE AND MAISON DE L'ARCADE.

inhabitants of this isolated rock. Already in the year 1420 the English fleet had appeared in the bay threatening their safety, but had been driven off. The necessity of stout defensive walls on the landward side was becoming of supreme importance, especially so as the Mount itself was by this time a key position, and the English in spite of slight checks were rapidly gaining the ascendancy with Paris already in their hands.

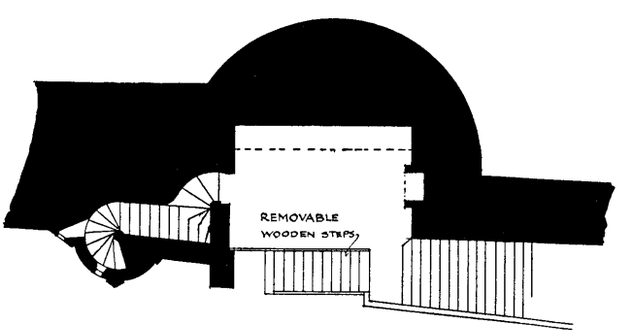
In view of the serious aspect things were assuming, it became necessary to appoint someone with rather more military experience than the pious Gonnault had acquired. Accordingly, Louis d'Estouteville, a soldier of considerable service, was nominated commandant of the position. He at once saw the necessity of augmenting Jolivet's defences as the rapid advance in the power of artillery was rendering the older fortifications obsolete. The danger to which long stretches of wall were subjected in the early days of artillery was due to the difficulty of protecting the walls from above, and unless enfilade fire could be brought to bear on every part of the wall, a breach was bound to be made, and in a very short time. A good covering fire would soon keep down the defender's heads below the parapet, and the construction of trebuchets and petraries could proceed with little molestation close up to the wall. D'Estouteville therefore constructed flanking towers at all the salient angles and at intervals along the walls, each in sight and range of its neighbour, thereby enabling the whole face of the wall to come under enfilade fire. All these towers with one exception still remain, and although in most cases the floors and roofs have disappeared, the joist and rafter corbels still remain and assist in visualising their former appearance. The walls are of great thickness, the upper parapet being carried out on immense corbels so as to give a passage some ten feet wide along the top. The lower part of the walls are battered considerably, which not only increases their stability, but also acts as a deflecting surface for missiles dropped from above.

D'Estouteville's attention was next directed to improving the defences of the entrance gate way, which up to that time suffered from lack of cover. He built two towers, one the Tour du Roi covering the outside, and the other the Tour Neuve covering the inside and also acting as a flank defence to the Tour du Roi. He also provided for an advance post for the guard and rallying point for the sentries posted along the curtains.

The Tour Neuve, the subject of the sketch, was ingeniously contrived to form not only a look-out and alarm post, but also as a defensive base in case the enemy penetrated the main gate. The Sergeant of the Guard occupied the half-timbered house, known as the Maison de l'Arcade, which was connected to the Tour Neuve by a circular stone stair or vise. Means of communication from the rampart walk with the street below was gained by a flight of stone steps running under the overhanging projection of the Maison de l'Arcade. The lower part of this stair was constructed of wooden steps easily removable and thereby preventing an enemy from making the ascent from the inside. Assuming that the outer gate had been won, the assailants would have to advance up the narrow high street of the town which was commanded throughout its entire length by the fortification wall and subject to a continual fire from above without any means of reply. The passage along the walls allowed the garrison to move without danger and assemble at any special point favourable to themselves, from whence they could inflict serious damage on the enemy massed in the street below and unprovided with cover.

It was not long before d'Estouteville's work was put to the test. In 1434 the English, with the renegade Jolivet to assist them, attacked the Mount from the landward side. Jolivet was trusting to his inside knowledge of the defences, knowing the weak spots in the wall, but he reckoned without d'Estoutville. The attacks of the English, though pressed with customary vigour, were everywhere defeated. It was a very brilliant affair, the garrison of the Mount numbering only some few hundreds, while the English employed a large army commanded by officers trained in these interminable wars.

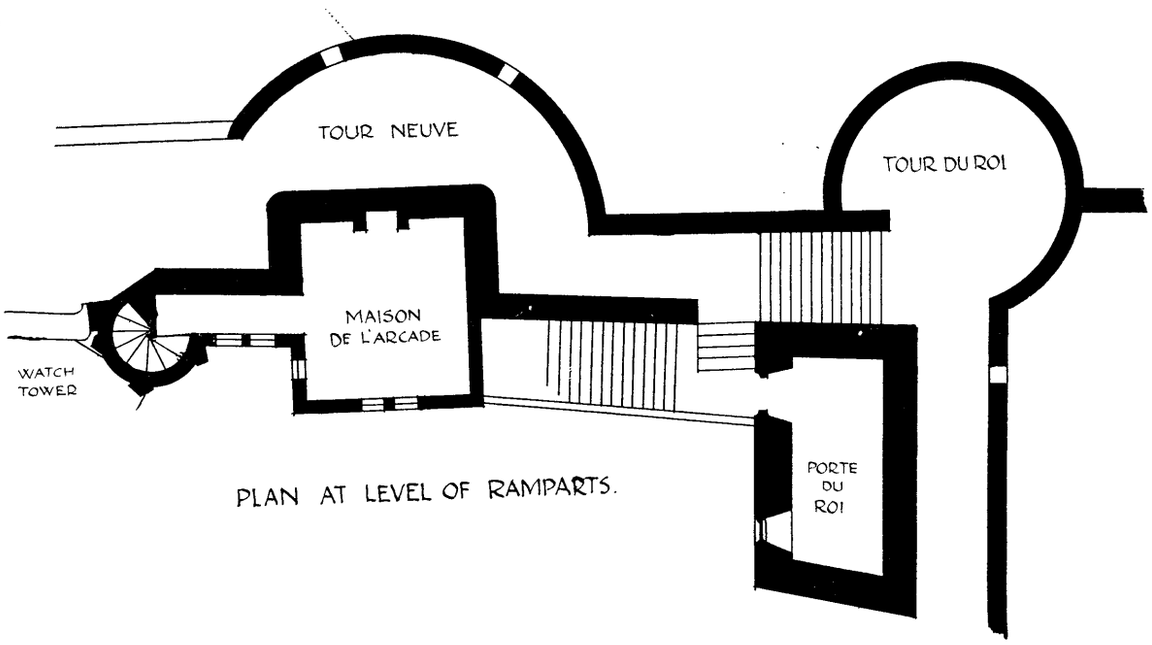
It only proved how excellently planned and constructed were the defences of Mont S. Michel to withstand such a determined assault pressed home with overwhelming odds. Some of the fruits of this victory can be seen to-day in the shape of the two bombards peacefully reposing on a projecting part of the Barbican. Though the garrison by



PLAN AT STREET LEVEL

the siege had been reduced to severe straits, they managed to follow up their victory and succeeded in occupying several fortresses in the vicinity. The English were not finally driven out of Normandy until the battle of Formigny in 1450, after which they soon lost all their French possessions with the exception of Calais, and this long, stupid and fruitless war came to an end.

What makes these fortifications so interesting is that they were actually constructed during the Hundred Years' War for an emergency that did really happen and against which they were successful. In this country the fortifications of towns have in so few cases been put to the test, and never, it is safe to say, have they had to undergo the



PLAN AT LEVEL OF RAMPARTS.

ordeal of a full pitched battle, excepting, of course, those of the Parliamentary wars, by which time they had become obsolete.

The whole of the Mont S. Michel defences are still in a wonderfully complete state of preservation, and thanks to the indefatigable zeal of M. Paul Gout, who supervised the restorations of 1906, it is still possible to traverse the whole length of the walls from the Tour Nord to the Tour du Roi without once having to descend to the town below. The Tour Neuve and the Maison de l'Arcade are still practically as they were when d'Estouteville built them, even to the extent of their shingle roofs. The only change has been the retention of the stone steps which had replaced the wooden ones after their use had ceased to exist. The group formed by these two buildings together with the semi-circular staircase and watch tower is quite unrivalled, even among the masterly achievements on this notable rock. Whether the builders were conscious of the artistic excellence displayed by their work is highly improbable. They were set to construct a defensive arrangement to meet the wishes of a commander entirely concerned with war which was at the time actually raging, and it is quite inconceivable that they should have been pre-occupied with æsthetic subtleties. Practical utility and straightforward construction was all that consciously served to direct them. The needs of the moment were paramount, and whether the work would last through the ages, or, what was more than likely, would be battered to ruin within the next few years, did not concern them. Their business was to make the best defence of the Mount that skill and knowledge would enable them to produce. That they succeeded in this history has proved. That they also succeeded in producing as masterly a work of art as any, even on Mont S. Michel, is to-day apparent to all.

Atlanta-Biltmore Hotel, Atlanta, Ga.

SCHULTZE & WEAVER, ARCHITECTS.

From the American "Architect & Architectural Review."

In selecting a type of architecture characteristic of the feeling and traditions of the South, it was quite natural that the architects for the Atlanta-Biltmore Hotel adopted Georgian.

The location on West Peachtree Street, between Fifth and Sixth Streets, covers an area of approximately four acres in the heart of Atlanta's residential district, and the group of buildings will, when completed, consist of the hotel and four detached apartment units, all of fireproof construction with all modern improvements and varying in height from ten to twelve storeys, of which the hotel and one apartment unit have been completed.

The exterior is of red tapestry brick laid in English bond with broad white joints, trimmed with limestone and architectural terra cotta.

The plot plan gives the feeling of a country club in the midst of a city, for while the ground floor with entrances from West Peachtree and Sixth Streets forms an arcade devoted to thirteen shops and a grill room 58 ft. by 75 ft., the main floor above, comprising the lobby 46 ft. by 62 ft., dining room and ball room each 57 ft. by 86 ft., is entered by two flights of marble stairs from the arcade floor, and also from the garden in the centre, laid out in broad stretches of lawns, flower beds and walks shaded by oak trees, around which circles the driveway entering from Fifth Street.

Instead of the roof garden, characteristic of the city hotel or club, the garden is so spacious as to permit of a terrace easily accommodating six hundred for tea and dinner dances, and such a setting with coloured lights festooned from ornamental lamp standards as seen through the trees, gives the feeling of the most refined seclusion.

Standing in the lobby, which is finished in black and gold marble, and natural finish mahogany, the vista extends nearly two hundred feet in either direction into the ballroom and into the dining room. These two rooms, and also the lobby are two storeys in height.

On the mezzanine floor are the writing gallery, executive offices and private dining rooms. Above are ten bedroom floors, the first having a number of specially designed sample rooms with wide doors, drop shelving and door beds.

On nine typical floors are suites of five rooms at each end of the building, so arranged as to be divided into smaller units or single rooms, and in the centre, overlooking the garden, are suites of two and three rooms, the remainder devoted to bedrooms, 11 ft. by 18 ft. and 13 ft. 6 in. by 18 ft., practically all of them being double rooms.

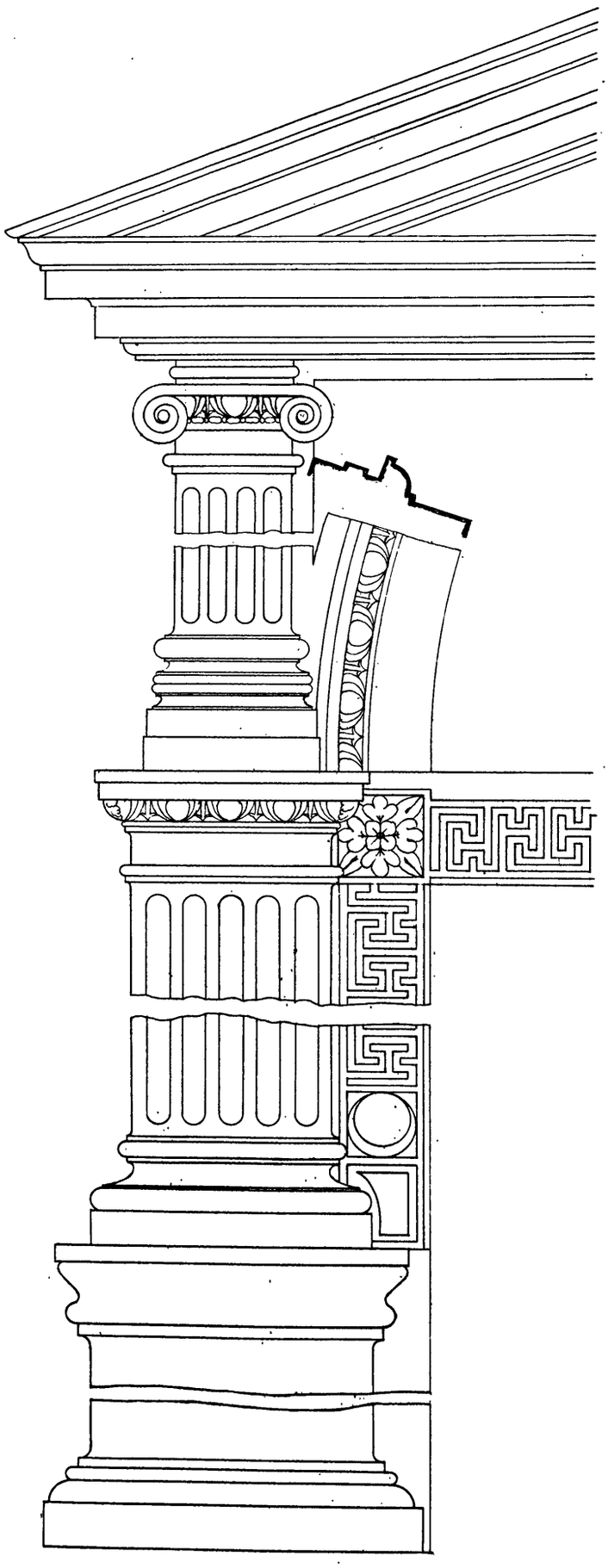
Each apartment suite has its private serving pantry equipped with plate warmer, refrigerator, sink and cupboard.

The typical bedrooms are similar in finish and furnishings, the walls having panel and picture moulds and painted a soft French gray, with carpets to match, and painted wood furniture. Each room has a tiled bath with built-in tubs and sanitary accessories.

Interior and exterior details carry out the same XVIII century architecture, as do also the furniture and furnishings.

All the public rooms face the street or garden and, in

DOORWAY FROM CLERK



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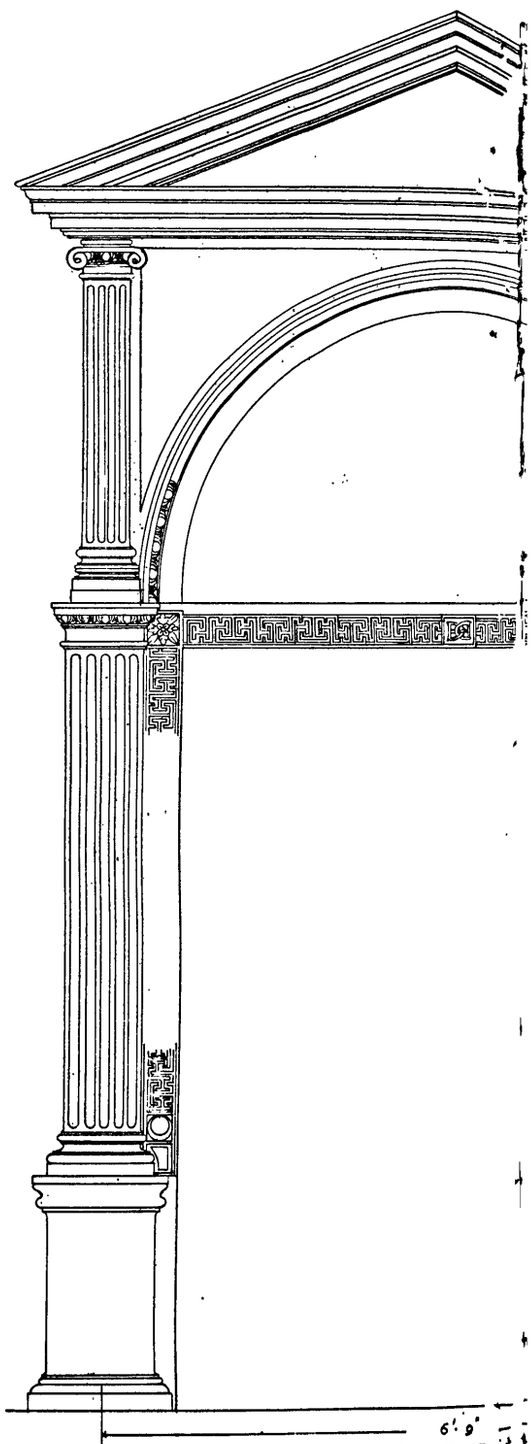

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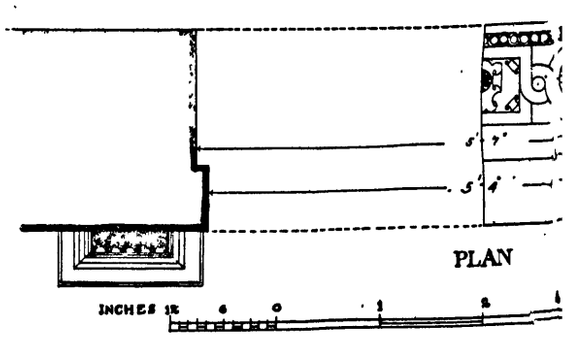

PLAN

INCHES

DOORWAY FROM CLER

MEASURED AND DRAWN BY

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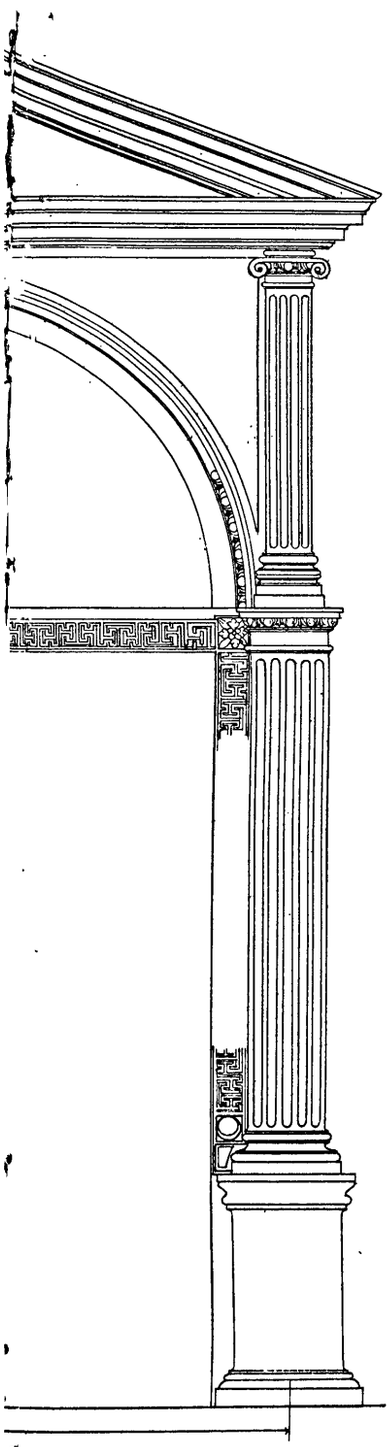

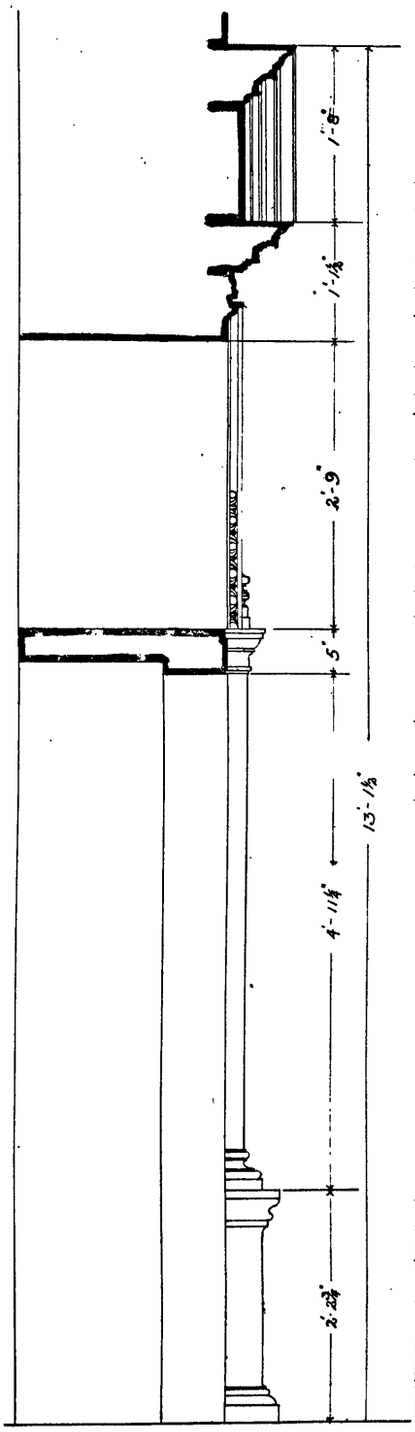

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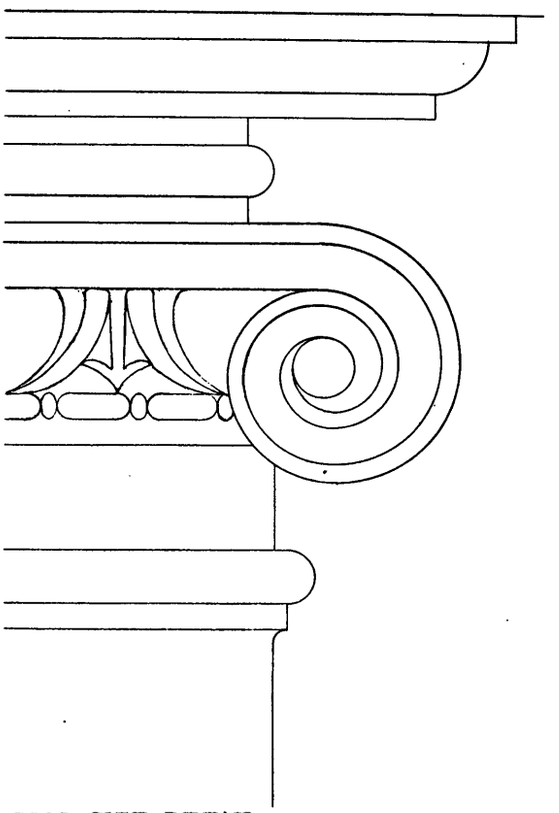
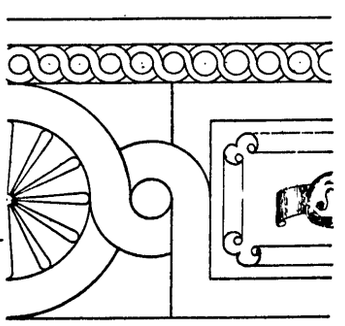
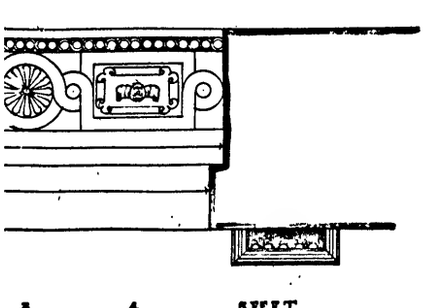


FULL SIZE DETAIL
OF IONIC CAP





DETAIL OF TRANSOME
SOFFITE
¼ FULL SIZE

MEASURED AT SOUTH KENSINGTON FEB 1922

PLOTTED FEB 1923.

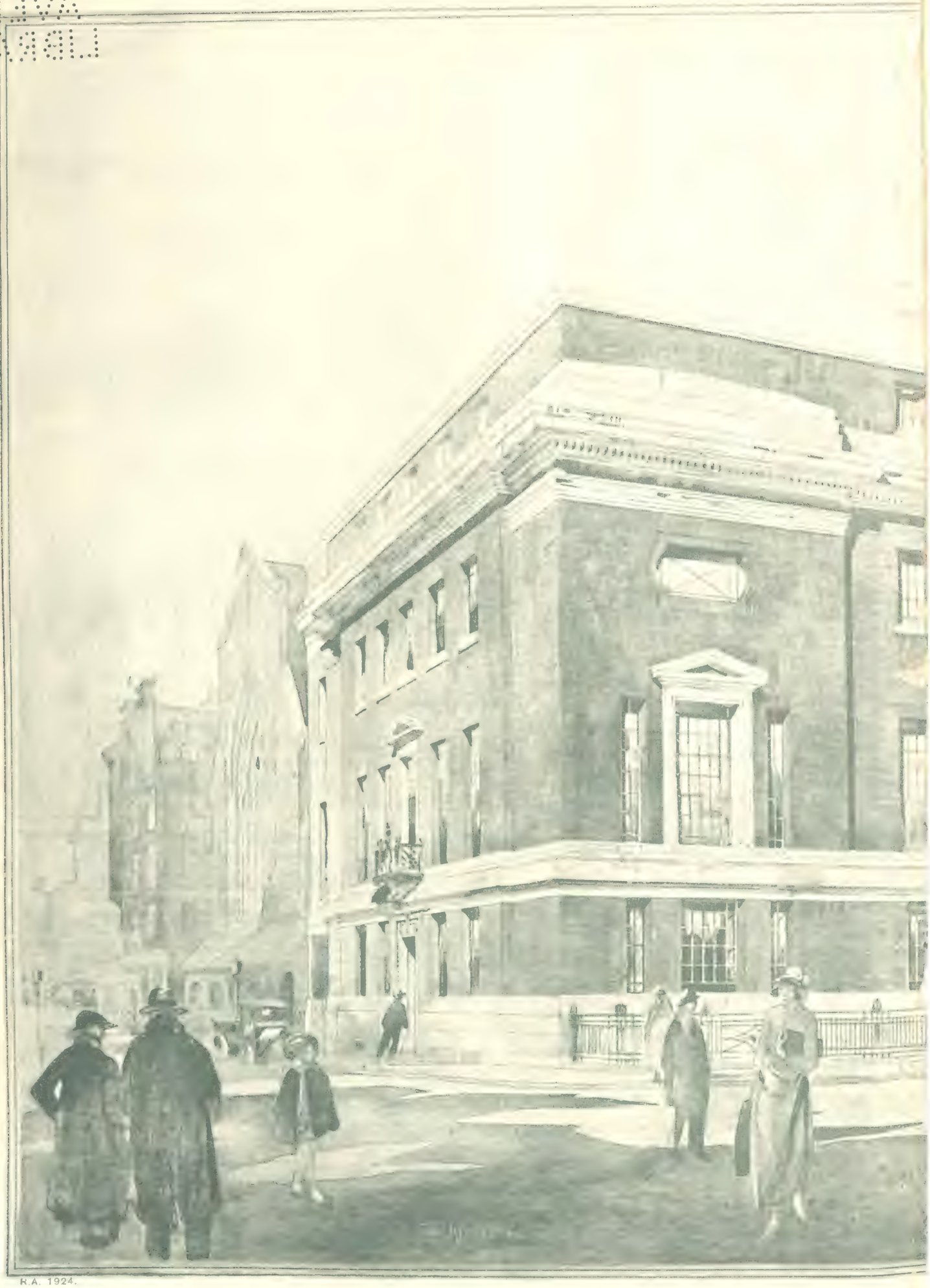
BY G. STANLEY HARRISON.

"PHOTO-LITHO" WM BROWN & CO. LTD. LONDON, E.C.3.

MONT FERRAND 1557.

. STANLEY HARRISON.

UNIVER
AVER
LIBRA

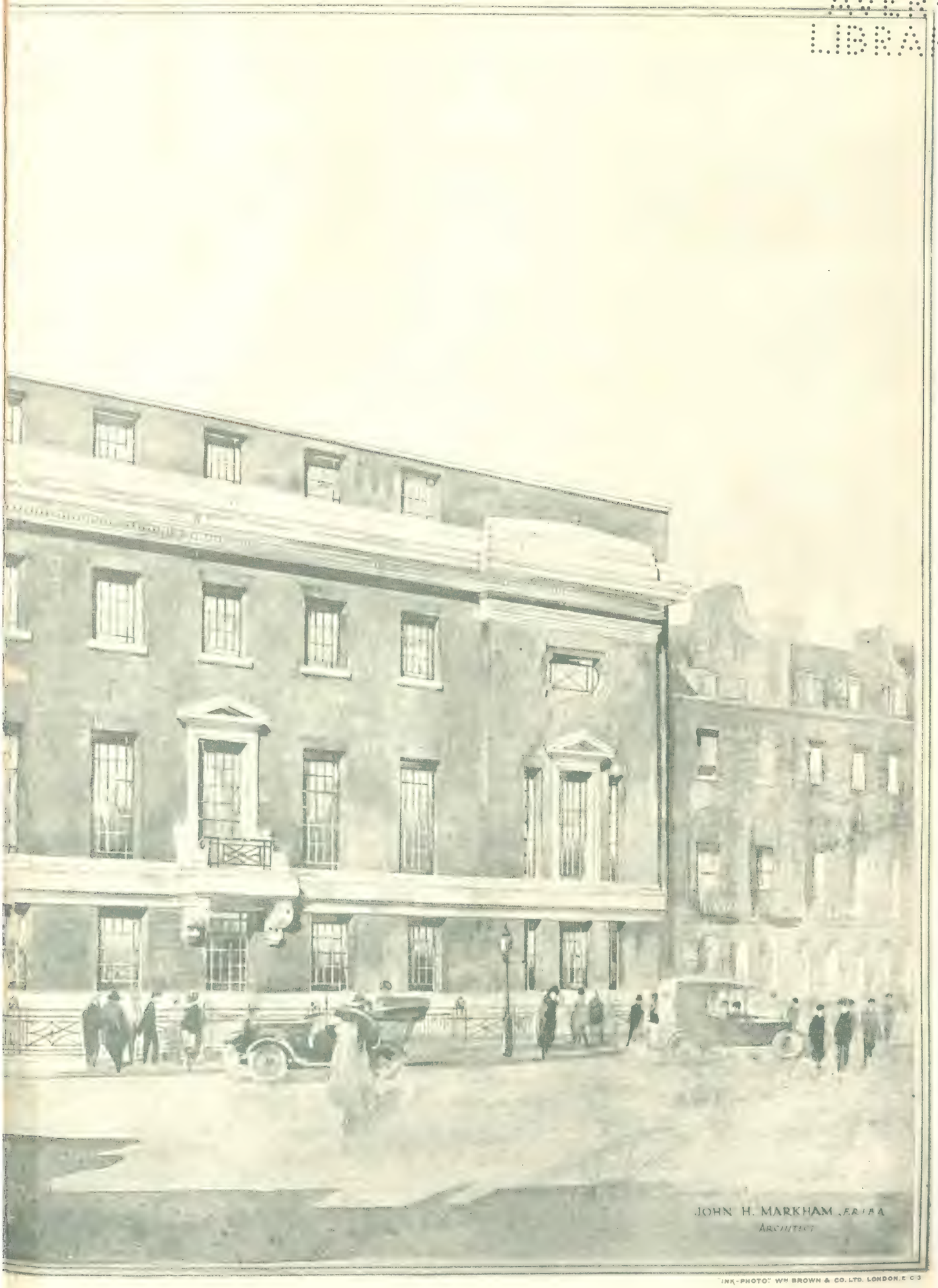


R.A. 1924.

SLOANE TELEP

JOHN H. MAR

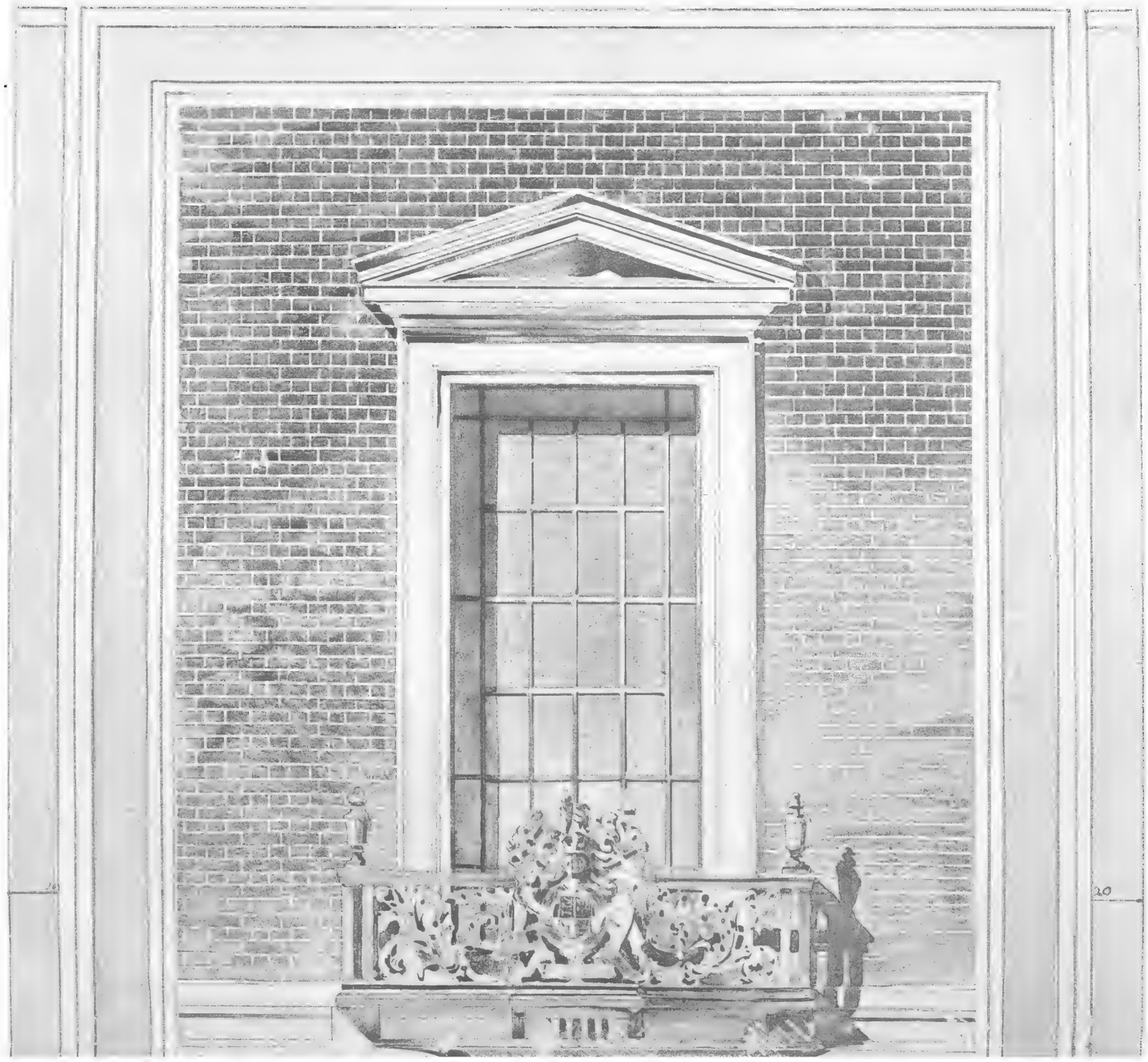
UNIVERS
AVER
LIBRA

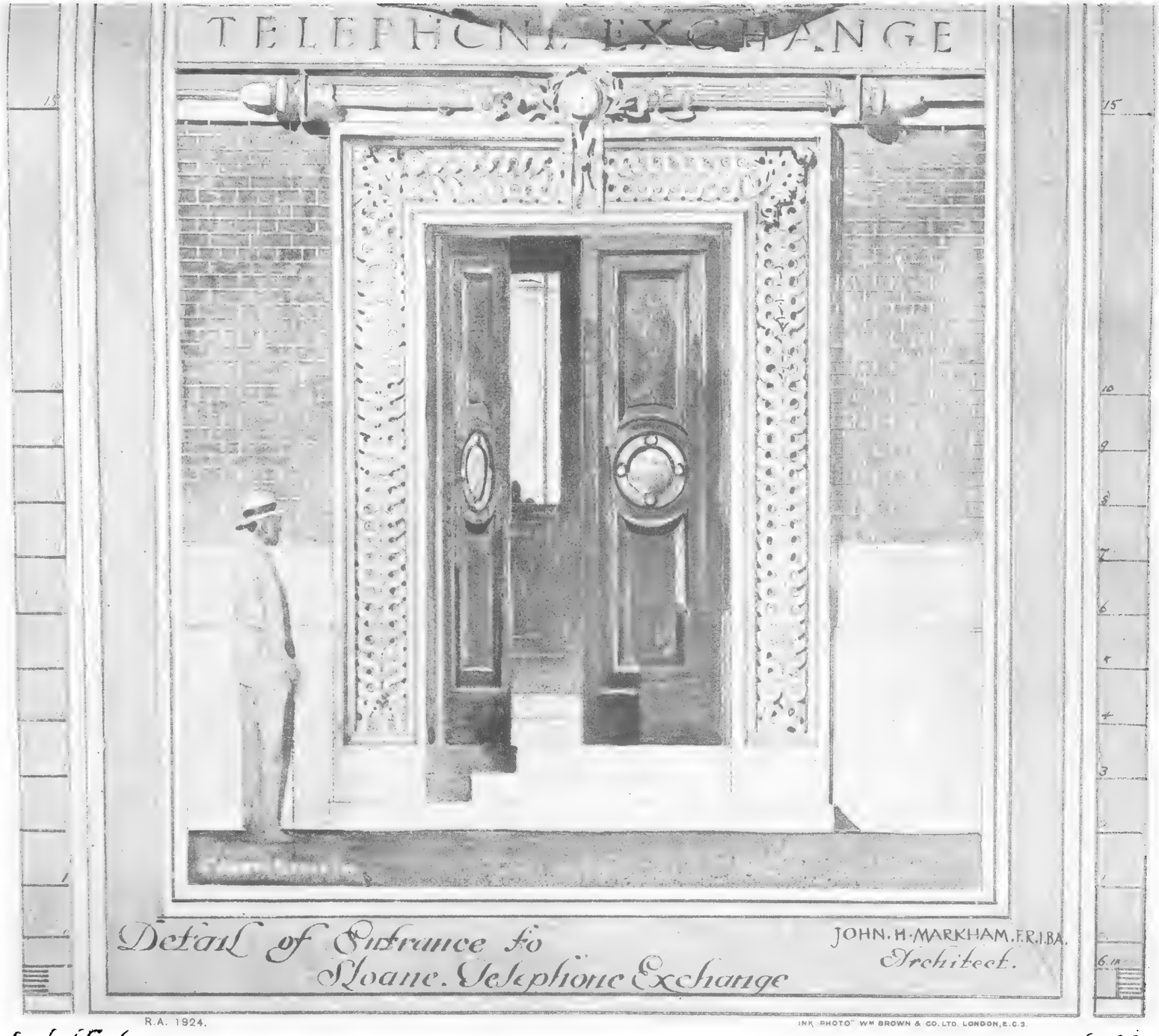


INK-PHOTO: WM BROWN & CO. LTD. LONDON, E.C.3

HONE EXCHANGE.

HAM, ARCHITECT.




TELEPHONE EXCHANGE
Detail of Entrance to Sloane Telephone Exchange
JOHN. H. MARKHAM. F.R.I.B.A. Architect.
R.A. 1924.
INK PHOTO WM BROWN & CO. LTD. LONDON, E.C.3.
Scale of feet.
Scale of feet.

DETAIL OF ENTRANCE TO SLOANE TELEPHONE EXCHANGE.

JOHN H. MARKHAM, ARCHITECT.

BALL ROOM.

ATLANTA-BILTMORE HOTEL, ATLANTA, GA. SCHULTZE AND WEAVER, Architects.

addition, are connected with the very efficient mechanical ventilating system, which also takes care of all service rooms and bathrooms.

The bedrooms are all outside rooms also facing the street or garden, and have transoms opening to the main corridor, which affords ideal ventilation.

The hotel is nearly 400 feet long and contains 560 rooms, each with bath. The apartment building contains eighteen suites of six rooms and two baths, and four suites of two rooms and bath.

We are glad to give some illustrations of this hotel, which emphasises our contention that American building projects are necessarily on an entirely different scale to our own, and afford little precedent for imitation. Atlanta is hardly a city of the first importance from an American standpoint.—ED.

The Law as to Architecture.

BY CLINTON H. BLAKE, JUN., OF THE NEW YORK BAR. From "The American Architect."

The difficulties of architects who proceed with work, without concluding sufficiently definite arrangements with their clients beforehand, are not confined by any means to the United States. I was in Montreal recently on the trial of a case and the Press, while I was there, reported a litigation which had just been decided, and in which the plaintiff, an architect, was endeavouring to collect his fees.

The facts appear to have been as follows: The architect claimed that he had conferred with the son of the defendant concerning the proposed construction of a house to cost not more than a fixed sum. The son submitted to the architect sketches of the proposed building, and the architect claimed that it was understood and agreed that these were to serve as the basis for the plans and specifications which the architect was to prepare. The architect prepared plans and specifications and claimed that he showed them to the defendant and that she was satisfied with them. He also claimed a special agreement on her part to pay him a certain sum for his work, in the event that he should succeed in obtaining bids for the house within a certain figure. He obtained two bids, both of which were slightly in excess of this figure. Later, according to the architect's testimony, the defendant advised him that she was not then ready to proceed with the building. He claimed that she should pay at that time one-half of the fees due for completing the plans and specifications. This she refused to do.

The evidence showed that the defendant, on the submission to her of the plans, criticised them in various particulars and then paid no further attention to them. The question arose, whether her examination and criticism of the plans and retention of them amounted to a ratification by her of the work done by the architect. It was agreed by both sides that she made no actual use of the plans.

Aside from the amount of the charge which the architect might, under the circumstances, make, and which would vary according to the facts and to local custom, the issues of interest in the above case are those dealing with the possible ratification by the client of the architect's acts, the extent to which the defendant is bound, if at all, by the acts of her son under the circumstances, and the effect of the agreement claimed by the architect that he should be paid an agreed amount, provided the bids were within a certain sum.

The court held that the defendant's son had no authority from his mother to act for her in the matter, and that she was not bound by his acts, as she had given to the architect no ground for believing that her son was her attorney. The court further held that the examination by the defendant of the plans submitted by the plaintiff and her criticism thereof did not amount to a ratification by her of the plans or the preparation of them; that she had made no use of them, and that she should not, under the circumstances, be compelled to pay for them. The architect's case was accordingly dismissed, and he was compelled to pay costs.

So far as the question of ratification in the above case is concerned, the holding of the judge that the consideration and criticism of the plans were not a ratification seems to be quite correct. This situation might well be varied, however, and a different decision arrived at, if a slightly different state of facts were shown. An examination of the plans by the defendant is inconsistent to some extent with an entire repudiation by her of the work done. The natural course for her to follow, when the plans were submitted to her would be to say that she had no interest in them, had never authorised anyone to prepare them and did not care to see them. If, in addition to examining them, her criticism had taken the form of suggestions indicative of her desire to make some use of them and to have the architect proceed with his work, and if her retention of them thereafter was such that it might be construed as an acceptance by her of the plans, implied from her failure to return them, there would be a possibility of the architect's recovering for the work done. This recovery, under such conditions, would not be defeated by the fact that the plans had not been used. The non-use of plans by a client cannot defeat the right of an architect to claim compensation for them, provided it can be shown that he was employed to prepare them in the first instance.

With respect to the alleged agreement that an agreed fee was to be paid if the bids were less than a specified amount, it was clear that the architect could not claim this fee unless the bids were less than that amount. This agreement might well be considered as a separate term of the contract, however, and should not defeat the right of the architect to recover the reasonable value of his services, or the value of his services at the regular agreed rate, if the work did cost more than the amount specified. This is a quite different situation, of course, from that which arises where it is agreed that the architect's whole fee is dependent on the work not exceeding a certain amount. In such a case, the architect could not recover if the fee did exceed that amount.

It is obvious that in this Canadian case the architect would have spared himself the expense of a law suit and the loss of his fee had he in the first instance confirmed the authority of the son to act. A few words in writing from the mother that the son was authorised to act for her, and that she desired to have the architect prepare plans and specifications in accordance with such rough sketches as the son might submit, would have brought about an entirely different result and saved the architect from a substantial loss.

It is never safe to proceed with work in dependence on the authority of the agent who gives the order being ratified by the principal at a later date. Where an architect does this, he is taking a grave risk. If he wishes to take this risk deliberately, he may, of course, do so. He must not, however, blink the fact that in such event the foundation upon which his employment rests may be swept away at any moment, leaving him powerless to seek redress or to collect any compensation for the work which he has done.

"The Architect" Fifty Years Ago.

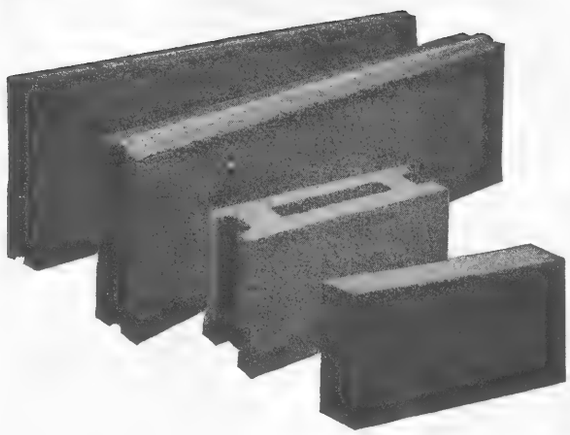
SEPTEMBER 19, 1874.

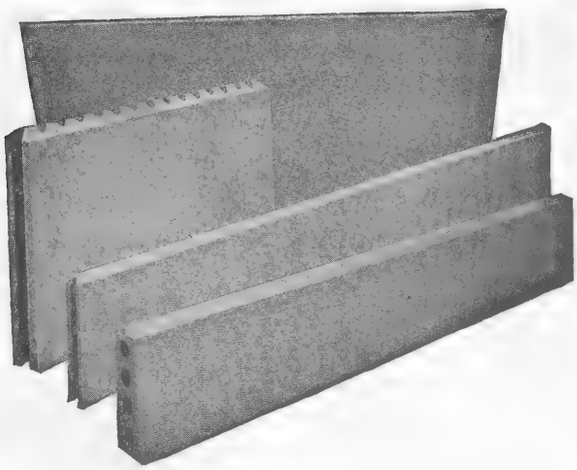
NORTHUMBERLAND HOUSE.

The three days' sale of this building resulted in a sum of about £5,000, and for this sum all the materials and the fittings of the main building have been disposed of, leaving the front in the Strand for another sale in November. This sum, though apparently small for the 456 lots into which the building was divided, is said to be higher than the materials were estimated to bring. On the second and third days the attendance was greater than on the first, and many of the public paid a last visit. On the last day the costly decorations of the large ball-room were sold, but, costly as they were to place on the walls, they fetched but little, "the richly-embellished and gilt ceiling, with raised figures and medallions, the gilt cornice, scroll stringing under, the gilt frames and decorations on wall next corridor," &c., fetching but £25 in the whole; no more could have been expected seeing the great cost of taking the gilding down. The Portland stone ashlaring, blocking, brickwork, and cornicing at the north end of the building fetched £110, and the lead over the ball-room and the materials in gutters, &c., fetched £194. There was nothing sold beyond mere materials, and in these were no things which relic collectors would purchase, or doubtless some of the lots would have brought still higher prices.

YORK.—The City Council have under consideration the desirability of erecting cottages on the hospital lands for the accommodation of members of the staff. It is suggested that accommodation for mental defectives could conveniently be provided at the City Mental Hospital.

CONCRETE BLOCKS "KING" PLASTER SLABS





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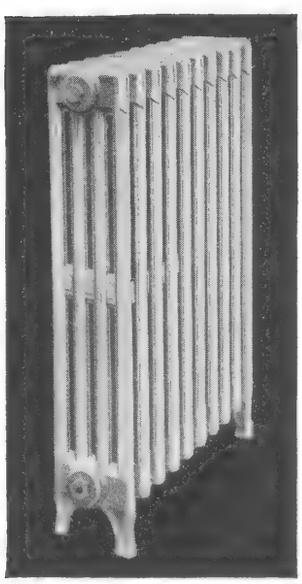

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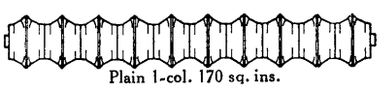
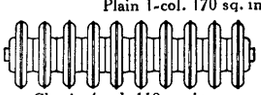

Plain 1-col. 170 sq. ins.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Building Progress.

In Sloane Terrace and Sedding Street, near Sloane Square Station, London, just opposite the First Church of Christ, Scientist, Messrs. Higgs and Hill, Ltd., are erecting an important block of office buildings, consisting of basement, ground and two other storeys. The steel construction is by Messrs. Dorman, Long and Co., Ltd. The treatment of the façades is in red brick with stone cornices and dressings.

Another important War Memorial is about to be erected, and the site selected is Hyde Park Corner adjacent to the Wellington Memorial. The modern erection will be in memory of the Corps of Royal Artillery. The Portland stonework will be supplied by G. E. Wallis & Sons, Ltd.

Messrs. Higgs & Hill, Ltd., are contractors for works upon the Naval and Military Club, Piccadilly, premises of some note in their time. The building was formerly known as Cambridge House, when it was the residence of Queen Victoria's uncle, the Duke of Cambridge, the present Queen Consort's grandfather. Subsequently it was the residence of Lord Palmerston. The late Duke of Cambridge lived lower down Piccadilly at its junction with Park Lane at Gloucester House, long since demolished. Messrs. Lenygon and Morant are acting as decorators for the latest works at old Cambridge House.

The "Daily Chronicle's" offices in Salisbury Court, Fleet Street, are in the hands just now of Messrs. Allen Fairhead & Sons, Ltd., for certain alterations. Marryatt-Scott lifts are being installed.

Messrs. George Parker & Sons, Ltd., are building a terrace block of shops on the site of Nos. 121–127 Hammersmith Road. The frontage will be in red brickwork.

Messrs. J. Lyons & Co., the well-known caterers, are having No. 38 King Street, Hammersmith, altered for their occupation. The stone composition is being executed by Lapidosus, Ltd.

In Vauxhall Bridge Road, London, there are various building works in hand just now; one of these is an alteration to No. 164, for the Midland Bank, Ltd., whose premises will be about doubled thereby. Messrs. Sheffield Brothers are the contractors for the work, which will be executed in architectural sympathy with the already existing premises. Messrs. Moreland, Hayne & Co., Ltd., are supplying the steelwork. Nos. 62–68 are being rebuilt from designs by Messrs. Parnacott, architects and surveyors, with Messrs. Holliday & Greenwood as the builders. Messrs. H. L. Holloway & Son are putting up new premises upon the site of Nos. 84 and 86, for which Messrs. Dorman, Long & Co., Ltd., are supplying the steelwork.

The National Gallery of British Art, commonly known as the Tate Gallery, is being extended by an addition to the flank and rear, of course in consonance with the pre-existing block. Holland and Hannen and Cubitts are the contractors, and Leonard Cooper, Ltd., are supplying the steel; the Westminster Wharfage Co., Ltd., are doing the demolition and excavation, and Kleine Patent floors are being introduced.

In our issue of September 12, we referred to the new premises in course of erection in Farringdon Street for Messrs. Gordon & Gotch. We should have added, that the architects are Messrs. Robert Angell & Curtis.

In Threadneedle Street, on the site of the former post office, a new block of buildings is now in hand, of which Arthur Vigor, Ltd., is the general contractor. The steelwork is being supplied by H. Young & Co., Ltd.; the masonry by Frank Mortimer, Ltd.; lifts by Aldous & Campbell, Ltd., and Marryatt & Scott; and plumbing by A. Grant & Sons.

In Baltic Street, off Goswell Road, Messrs. Patman & Fotheringham, Ltd., are commencing work upon an extended block of business premises for which Messrs. Dorman, Long & Co., Ltd., are supplying the steelwork.

Were Rahere to come to life in these days, he would marvel greatly at the vast increase in size and accommodation accorded to the somewhat modest hospital which he founded at West Smithfield. Indeed, to come to much later days, a similar surprise would greet King Henry VIII were he to contrast the Bart's. which he re-founded, with the modern mammoth. At the present time, the already huge hospital is receiving a large accretion of new buildings along Little Britain and King Edward Street frontages, to replace the old domestic property to which London has been so long accustomed. Dove Brothers, Ltd., are the general contractors; Nelson Wise is acting as housebreaker and excavator; Burkenite, Ltd., for patent jointless flooring; Adamsez, Ltd., for sanitary fittings; and Marryat & Scott, for lifts. A portion is nearing completion, and its stone façade is plain but effective.

Fifty Years Hence.

There is a certain amount of interest in contrasting (we will not say, in comparing) present-day conditions with those of 1924, and in showing how correct we are in not supporting those who assume the character of *laudatores temporis acti*. Whether in the political, or social, or religious, or (finally) the architectural world, we assert, and without fear of maintainable contradiction, that in every way we are more advanced and are better and more entirely intelligent.

We do not intend in this article to deal with any other aspect than the architectural one. And (*venant sans delai à nos moutons*) we would remark, that fifty years ago, architects were indulging in the most absurd capers in the endeavour to develope a new style; the restlessness, the self-opinionated excursions and alarms, the nightmare phantasticalities, were too awful almost to be conceived. Of course, there were some notable exceptions. Let us make mention of that ecclesiastical pile recently completed, Liverpool Cathedral, whose venerable architect is still in our midst. Sir Gilbert Scott, P.R.A., was a very young man when he won the competition for the cathedral with a design in many respects different from that which we now see completed. But first and last, his aim was to give a phase of Gothic art, which, avoiding slavish copying of the past, should express contemporary conditions as based upon a form of architecture which had been indigenous to our country. A well-known architect of the nineteenth century had proceeded on similarly sane lines in the design of that other magnificent cathedral for Roman Catholics at Westminster, though in that case, as we all know, the "Style" was not indigenous, but foreign in its origin. Now, the result of the few brilliant exceptions to the general run of slavish imitation we see in our present-day progressive development in architecture. The many unbrilliant strivings after a new Style, which twentieth century architects spawned forth, bore in their conception the very seeds of death. It is a commonplace to say, in these enlightened days, that Style is a matter of constant development upon precedent productions, due to the altering conditions, either in materials, currency of thought, or other phases of human activity.

And this greater sanity of architectural conduct has really eliminated the necessity of proceeding with the long-debated proposal of unification and registration of practitioners of architecture. The Royal Institute of British Architects, in voting upon its new Council very shortly, will, we believe, give effect to this view, and will elect members who will be practically instructed to shelve further consideration of these hoary-headed phantoms, which seemed so nearly materialising in the unregretted old days of half a century since.

Competition News.

The Statute Labour Committee have now agreed to plans of the City Engineer for the proposed bridge across the Clyde at Dixon Street, and decided that competitive schemes be invited from outside architects for the erection of the bridge and the improvement and lay-out of the whole area from St. Enoch's Square at Argyle Street to the south side of the river at South Portland Street. In connection with the scheme the Lord Provost has suggested that advantage should be taken to improve the thoroughfares and facilitating tramway traffic alongside the river from Jamaica Bridge to Albert Bridge on the south, and between Stockwell Bridge and Albert Bridge on the north. This matter is to be considered by the committee.

New Cinema at Wombwell.

A new company registered, with a capital of £12,000 for a new cinema in High Street, Wombwell. The plans for the building have been prepared by Mr. C. Castelow, architect, Park Row, Leeds.

Cottage Hospital for Castleford.

Plans have been prepared for the erection of a cottage hospital at Hightown for the Castleford, Normanton and District Cottage Hospital Committee. The architect is Mr. Easdale, of County Chambers, Castleford.

BRITANNIC HOUSE, E.C.2 (Moorgate Front).
Architect:
Sir E. L. Lutyens, R.A.

Steelwork Manufactured and Erected by
Redpath, Brown & Co. Ltd.

REDPATH, BROWN & CO. Ltd.

CONSTRUCTIONAL ENGINEERS,

3 LAURENCE POUNTNEY HILL, E.C.4

WORKS AND STOCKYARDS

LONDON	MANCHESTER	EDINBURGH	GLASGOW	BIRMINGHAM	NEWCASTLE-ON-TYNE
Riverside Works, East Greenwich, S.E.	Trafford Park.	St. Andrew Steel Works.	Westburn, Newton. Office: 19 Waterloo St.	Office: 47 Temple Row..	Office: Milburn House.

REGISTERED OFFICES: 2 St. Andrew Square, EDINBURGH.

General News.

AYLESBURY.—The Town Council have reserved two sites on the housing estate, one for the erection of an infants' school, and another for the erection of a building for central day continuation and technical schools. Another hundred houses are to be built, and tenders have been accepted for 64 at £30,390 and 36 at £13,888.

BARNES.—Plans passed: 9 houses Stonehill Road, for Messrs. Rosevears, Ltd.; 6 houses Nassau Road, for Mr. E. Broughton; extension of Mortlake Brewery, for Messrs. Watney, Combe, Reid & Co.; 32 houses Warren Avenue, for Barker's estate; 5 houses Stanley Road, for Mr. R. B. Rowell; film store, Station Road, for Mr. G. J. Viner.

BERMONDSEY.—Plans have now been passed by the L.C.C. for the conversion of the Parish Street workhouse into flats for temporary rehousing purposes. Plans passed: 12 shops and flats, Tower Bridge Road, for Mr. E. L. Haynes, on behalf of Messrs. E. Mortimer, Ltd.

CAMBERWELL.—The Borough Council passed the following plans: 16 houses, Ruskin Walk, for Messrs. Andrews & Peascod; building 92-95 Rye Lane, for Messrs. Woolworth & Co., Ltd.; 5 houses, Hill Court Road, for Mr. Figgis; 6 lock-up shops, Norwood Road, for Mr. Cooper; building at Nos. 324-5 and 8 Grace's Mews, for Mr. J. C. Collings; buildings at the corner of Peckham Rye and Nunhead Crescent, for Messrs. Downton & Co.; shops on site at corner of Peckham Park Road and Greenhundred Road, for Messrs. A. Robertson & Sons.

DOUGLAS (I.o.M.).—The Borough Surveyor has prepared plans for the widening of the approach to the Victoria Pier at an estimated cost of £91,000. The information is to be forwarded to the Lieutenant-Governor.—Plans passed: new school and hall, Playing Fields Road for St. Ninian's Church.

GLASGOW.—The Scottish Board of Health have agreed to make a grant of £180 per bed towards the scheme for the proposed new pavilion of 24 beds at the Bellefield sanatorium.—The City Engineer has prepared plans for an infant welfare clinic at Elder Park, estimated to cost £6,500. It is proposed to erect a similar centre at Springburn, and plans have been approved by the Scottish Board.—Two properties adjoining the electricity showroom in Sauchiehall Street are to be purchased at a cost of £1,045 for enlarging the showroom.

LAMBETH.—The London County Council gives notice of intention to erect a new elementary school for about 500 children and capable of enlargement by 128 places, to serve the districts of West Norwood and West Dulwich.

PAIGNTON.—Mr. F. W. Eggins has been appointed Council architect for the housing scheme at Preston.

PENZANCE.—The Town Council have passed plans for further alterations at the Railway Hotel for the Redruth Brewery Co., and the rebuilding of a shop in Causeway Head, for Mr. J. N. James.—Improved accommodation is to be provided at the cattle market.

PETERBOROUGH.—The City Engineer is to prepare a report on the decorative scheme for the Council Chamber at the Town Hall.—The Milton Estate Office has had tenders for a new building to be erected in Cathedral Gateway.—Modified plans are to be prepared for the erection of an infant welfare centre.—Plans passed: alterations to Six Bells Inn, at Westwood, for Northampton Brewery Company; lecture room at St. Peter's College for Dean and Chapter.

SEDGLEY.—At the Urban District Council the engineers for the Lower Gornal scheme for sewerage and sewage disposal submitted plans, the cost being estimated at £76,000. The scheme was approved, and the engineers, Messrs. Willcox & Raikes, were authorised to proceed with the preparation of quantities without waiting for the approval of the Ministry of Health to the scheme, which it is desired to carry out without delay. Plans have been passed for alterations at the Pig and Whistle, High Street, for the Wolverhampton and Dudley Breweries, Ltd.—A committee has been asked to report on extensions to the gas works suggested by the gas manager, and involving an outlay of £14,300.

Trade Notes.

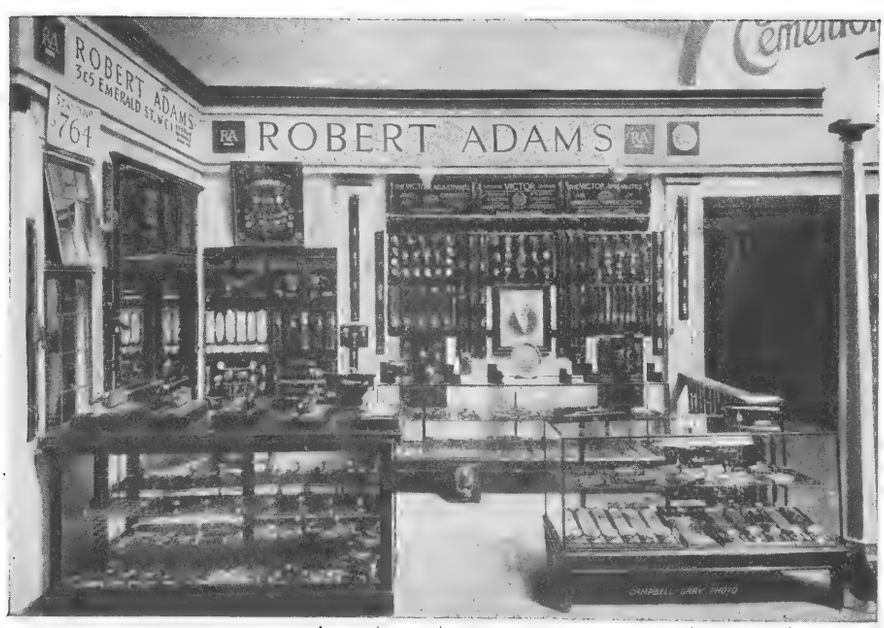
Boyle's latest patent "air-pump" ventilators have been applied to the New Institute, Porth, Rhondda. Supplied by Messrs. Robert Boyle & Son, ventilating engineers, Holborn Viaduct, London.

The Reliance Lubricating Oil Co., Ltd., whose offices are at 19 and 20 Water Lane, Great Tower Street, London, E.C. 3, send us their list of oils, lubricants and greases. The Company is the oldest established firm in the country dealing in this class of business, for which they have earned a reputation and they are naturally proud of the fact, and also that the business was founded, owned, and is managed entirely by Britishers born and bred. The Company hold many important contracts. The Governing Director is Mr. Alfred Holt, F.R.G.S., F.Z.S., etc.

We are asked to announce that Messrs. Rhodes Chains, Ltd., patentees and manufacturers of Rhodes' patent pulleys, cog and grooved wheel, rustproof sash chains and other window fittings, have secured the services of Mr. H. H. Millett as sales manager. Their illustrated catalogue may be had on application and architects' requirements will receive individual attention. This firm have recently moved from Stoke Newington to more convenient and centrally situated premises at 178 Charing Cross Road, W.C.2. (Telephone: Regent 6488.)

British Empire Exhibition.

We have received from Mr. Robert Adams a folder giving particulars of the railway facilities for the visitor to the British Empire Exhibition at Wembley. The stand of Robert Adams is to be found at S764, Building Section, in the Palace of Industry, and has been well patronised. The firm of Robert Adams have for many years held a well deserved name for the excellence of their patent door springs and for high-class door and window fittings, for which they have been awarded no less than 60 highest awards at international and trade exhibitions. We give an illustration of their stand at Wembley and it will be noticed that Mr. Adams is exhibiting a comprehensive exhibit of his many patents.



MESSRS. ROBERT ADAMS' STAND AT THE BRITISH EMPIRE EXHIBITION.

VOL. CXII.—2910. THE ARCHITECT SEPT. 26, 1924.

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Cheaper Building.

The Problem.—All over the length and breadth of the land small houses are wanted for the working classes and the middle classes. With the object of demonstrating what science and invention have made possible, we propose to give short articles week by week describing new building methods, the work carried out by specialist firms, who in many cases carry out work themselves, while in others they patent methods which can be used by the ordinary builder. Broadly speaking, the new methods of building may be divided into three main classes: different methods of using wood construction, the use of concrete, either in the form of blocks or slabs, and methods in which steel framing and concrete are used in combination. In addition, many firms have specialised in some one kind of material—roofing coverings, flooring, or the various kinds of substitutes for plaster work, special bricks and other materials.

The Question of Durability.—We do not fully realise the changes which have taken place in something like geometric proportion. The population of England only doubled in the five centuries which elapsed between the Conquest and the reign of Elizabeth. Recently our population has doubled within the span of half a century, and, more than this, whole industries have grown up in districts and been abandoned within a comparatively short span for newer and more favoured localities, and our whole conditions of life are undergoing a kind of kaleidoscopic change. These new conditions, if realised, should have an intimate bearing on the question of building and accommodation, as nothing has the same permanence as in the past.

Architectural Considerations. — Architects, who have a better knowledge of what we owe to past ages than the outside public, are naturally inclined to favour both the preservation of what comes down to us from the past and the continuance of the great traditions of English building. They would like to see the erection of new villages and garden communities, which would continue and add to the historic store of beauty, only improving accommodation and bringing it in accord with the hygienic requirements of the age. But the ever-pressing and changing requirements of the times in which we live, the overriding consideration of finance, and the attitude of Labour regarding output, all tend to direct our attention towards possible means of erecting buildings of materials which, though they may not have the same durability as the brick and stone, tile and slate, which we have been accustomed to use, may yet meet all our wants for a reasonable span of years, and the reduced cost of which will enable housing to be put on something approaching an economic basis, as well as enabling those whose means are limited to meet their requirements.

We see year by year new materials invented, new methods of construction devised, some of which fail in their object, while others may be destined to be useful. As a rule, architects would rather build in the traditional manner, and have not taken as much interest in newer forms of construction as the subject deserves, with the result that little architectural skill has been expended in their design. It is time to remedy this deficiency, for it is abundantly clear to us that unless a radical change takes place in the attitude of Labour, the provision of smaller buildings will either be inadequate for our needs or will prove an unbearable burden on the public purse.

We have never been convinced that the outcry for a relaxation of Building Bye-Laws is justified except to a small extent. Footings should be eliminated in all smaller buildings, as they serve no useful purpose; the regulations affecting attic rooms and prescribing a given ratio of ceiling to floor area need elimination or drastic revision. But on the whole it is difficult to see, if we build in the usual manner, that bye-laws, generally speaking, can be usefully relaxed.

The greatest reform would be one which would permit the use of materials not thought of when bye-laws were first laid down, and, above all, the doing away with clauses which place any restriction on the use of wood and such materials for buildings which are reasonably isolated from one another.

In alluding to special systems we shall in some cases be able to speak from actual experience and with authority; in others we shall confine ourselves to a description of merits and the aims of inventors and manufacturers.

The architect's skill is really more required in the use of materials and methods which are new than in the use of ordinary ones. In addition, the design of buildings in which they are used will frequently necessitate higher and more inventive skill than that required in the case of ordinary buildings. We believe those who put new systems on the market will readily recognise this, and should architects, as a profession, turn their attention to this branch of building, we are sure that useful progress would be made.

The Attitude of Organised Labour.—While fully recognising the useful work of the trade unions, it must be admitted that the present attitude of Labour has generally been unhelpful, as it has been dominated too entirely by a determination to exact terms from capital which can only be permanent if they can be provided out of income. Labour will not frankly recognise that the laws of demand and supply must in the end prevail and that business cannot be carried on at a loss. The only way to make higher wages permanent is to increase output and the consequent profits of enterprise, and were this done Labour could demand and would obtain the largest share of increased profits, while the losses of years of war would gradually be made good. If extreme democratic measures can increase the world's riches, democracy is fairly entitled to the greatest share of that increase; but justice and common sense alike condemn the attempt to snatch temporary advantages by seizing the savings of the community for distribution.

Summary.—The end to be gained is the provision of cheaper houses, which in many cases can be largely erected by unskilled labour, the release of materials the use of which is necessary in larger and heavier buildings, and the provision of what is badly needed in a shorter

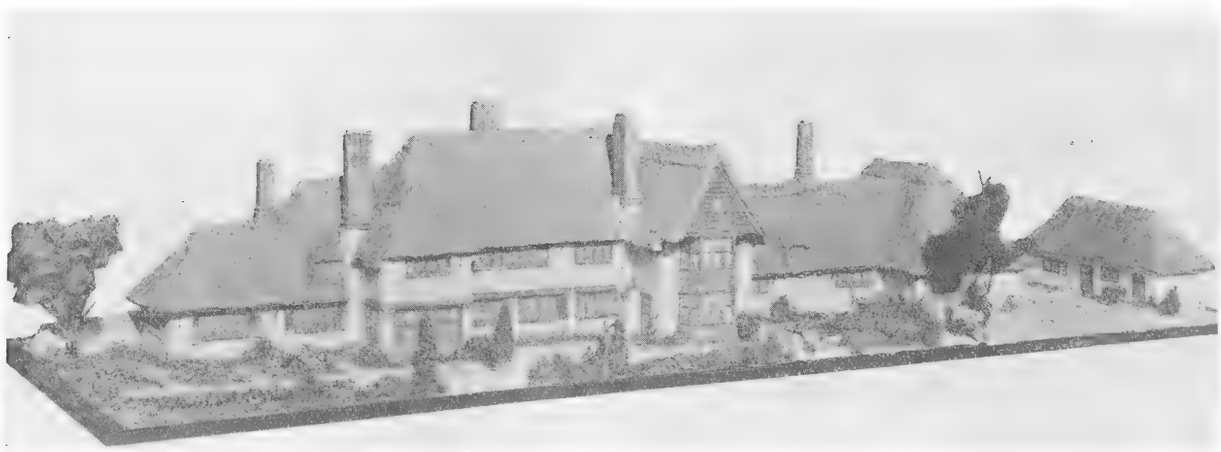
period of time than is now possible. If, in the case of housing, the average cost of a house can be reduced by £150 to £200, housing will be brought within measurable distance of sound finance. What we urge is desirable, whether Governments carry out housing schemes or leave the provision of necessary housing to private enterprise, but is more desirable in the former than the latter eventuality, because there is little doubt that the parallel existence of State-aided and private building causes labour congestion, encourages the advance of prices, and makes both more costly than they need be. We also see no reason why the employment of more ephemeral systems of building should not be consistent with good work and design, since even nature has its annuals and perennials, both of which beautify the earth.

Our Illustrations.

HOUSE NEAR MELTON MOWBRAY, LEICESTERSHIRE. P. D. HEPWORTH, Architect.

ROADSIDE BUNGALOW NEAR HALSTEAD. P. D. HEPWORTH, Architect.

INTERIOR DETAILS OF ROADSIDE BUNGALOW NEAR HALSTEAD. P. D. HEPWORTH, Architect.



MODEL OF HOUSE NEAR MELTON MOWBRAY, LEICESTERSHIRE. P. D. HEPWORTH, Architect.

HOUSE AT MELTON MOWBRAY, LEICESTERSHIRE.
P. D. HEPWORTH, Architect.

The form of this house was largely determined by some existing foundations of which it was desired to make use. Being built in a straggling village of low thatched cottages, the house was kept as low as possible on the front line or lane side. The main rooms and bedrooms overlook a magnificent view to the South. A feature of the ground floor is a vista through three living rooms terminating in a front porch. The kitchen quarters surround a small courtyard in front and the servants' quarters over are separated from the house proper. There are nine bedrooms and three bathrooms and seven servants' bedrooms, with a double garage at the north end of service wing. The contract price is £9,192.

ROADSIDE BUNGALOW NEAR HALSTEAD.
P. D. HEPWORTH, Architect.

This bungalow was planned to be placed nearly on the frontage of a country lane. It gives the maximum garden space behind to the South. There is a miniature entrance courtyard, and only office windows face the road. The accommodation consists of a large living room, dining room and four bedrooms. The bedrooms and offices have each been planned to be independent of the living rooms. The maids' quarters consist of a small working kitchen, sitting room and bedroom *en suite*.

The treatment of the recessed court in the centre with its low walls and gateway is pleasing, while the continuance of the walls on the two sides of the composition gives breadth to the design.

Notes and Comments.

Wisdom While You Wait—for Houses!

Mr. Wheatley now states that unless there is a higher minimum output by 150 per cent. above the average for the last fifteen pre-war years, his plans will come to nothing.

We quite agree with this conclusion, but surely Mr. Wheatley might have arrived at it before and not after his Act was passed. We should consider it quite absurd to decide on a Polar expedition, make all arrangements as to provisioning and finance, and then to find out that owing to the physical strength of the men available it was impossible to carry out the expedition. This seems to have been Mr. Wheatley's method, and amounts to wasting the time of Parliament and of the nation. If Mr. Wheatley cannot produce the houses wanted, what advantage is there in introducing a grandiose scheme? More than this, it blocks the way for the adoption of what might be really practicable and useful. We often find that those who criticise a plan or proposal are marked down as being hostile to the object aimed at, while nothing could be farther from the facts. But it is a good thing if Mr. Wheatley is now convinced that his plan is impossible of attainment and will speak openly and frankly in telling Labour why it is impossible under present conditions, and that if it is to be made possible Labour must do its fair share by helping to deliver the goods.

The Activities of Building Societies.

Building societies are said to be doing an unprecedented amount of business. The Chief Registrar of Friendly Societies states that though the figures for 1923 are not yet available, advances made amount to over £30,000,000, and the total assets of building societies were over £100,000,000, and are believed to amount to £120,000,000. The total membership has grown by 40,000 and it is anticipated that the total figures will have gone up from 826,032 to 880,000. Building societies are specially active in the West Riding of Yorkshire, the case of the Leeds Permanent Society being typical; the investors with the society during the year amount to 91,000, and new borrowers represent 1,000, the loans granted to the latter amounting to a million and a half. The assets of the society are in the neighbourhood of £5,000,000, an increase of three-quarters of a million during the last year, and the society has lent more on interest than the society possessed at the end of the last financial year. In spite of these figures the society had not a single property in its possession through the failure of a borrower. All other societies are doing enormous business. These facts should be noticed by the Government, whose policy should be to help the societies in every possible manner, as they have a vast fund of experience at their disposal and know exactly how to obtain the best and safest results.

An Engineer's Salary.

Indignation has been expressed at the appointment advertised by the Wandsworth Council where an engineer competent to take levels, make surveys and prepare plans for engineering and building works, is offered £2 a week, rising by yearly increments to £3 a week at the end of eight years. We are reminded that the Council pays its dustmen considerably more, and that few dustmen have to undergo an expensive education to fit them for their work. On the face of the facts as stated it is clear that the Council have made a mistake if they want to secure the services of anyone whom they would be justified in giving responsible work to. In spite of the difficulty of securing such appointments and the rush of applicants for them we should say Wandsworth might have to wait until it offers £4 to £5 a week for the services required. But it is a mistake to compare the wages of unskilled labour as a necessary indication that salaries offered to professional men are too low. Such cases are, on the other hand, convincing proof that unskilled labour is usually paid at an utterly absurd figure, one possibly fixed by the philanthropic determination to pay a man what he may want to have rather than what the services rendered are worth.

Criticism.

Sir Edwin Lutyens has not pleased the critic who writes in the "Observer." His bank in Piccadilly is condemned, first because it does not rise to the same height as Princes Restaurant adjoining; secondly, because the external treatment of the building, which is divided into three storeys, belies the internal division of a single hall; and thirdly, because of a keystone said to be without rhyme or reason. It concludes that originality *à tout prix* was Sir Edwin's aim. We have seen the building, but without devoting the critical attention which the "Observer's" article suggests. The bank seems to us to belong more to a group of buildings, of which St. James' Church is the chief element, than to the adjoining restaurant. Moreover, the requirements of the bank probably did not require a building of higher elevation. The adjoining restaurant forms a section of the Institute of Painters in Water Colours Gallery, which is an entity in itself and not a street frontage suggesting extension. Piccadilly has always been a thoroughfare marked by the individual character of its buildings and it seems rather late in the day to suggest that an endeavour should be made to render it more uniform, for it can hardly be effected in our time. As for the haughtiness in the expression of an internal unit as a building of several storeys we do not feel very strongly. Sometimes it seems permissible and at others should be avoided. The Banqueting Hall in Whitehall is a notable criminal in this matter!

A Greater Union.

The various sections of the building trades are considering the formation of a great union to embrace all the crafts, a movement which might have beneficial results or, on the other hand, prove intolerable to the general public. As it is a building may be held up at a critical stage for want of one class of operatives who are often standing out on some small point. If the greater union uses its powers to compose and bring into line its various component parts the new proposal would be entirely beneficial, as it would mean fewer strikes or disputes and these only on really serious issues. But on the other hand, if the greater union is used as a weapon to secure by force the smaller aims of every section, an intolerable situation would be produced, which will mean that further obstacles are put in the way of building enterprise. But there is always a possibility that larger and more general interests would bring to the fore men who will look at problems from a larger and broader standpoint, which is what all would be glad to see. The larger union might for instance, overrule the objection taken by one trade to increase the number of apprentices as it should recognise that there is no advantage in a system which may hold up several trades for a shortage of men in one or two other industries.

The World without Capital.

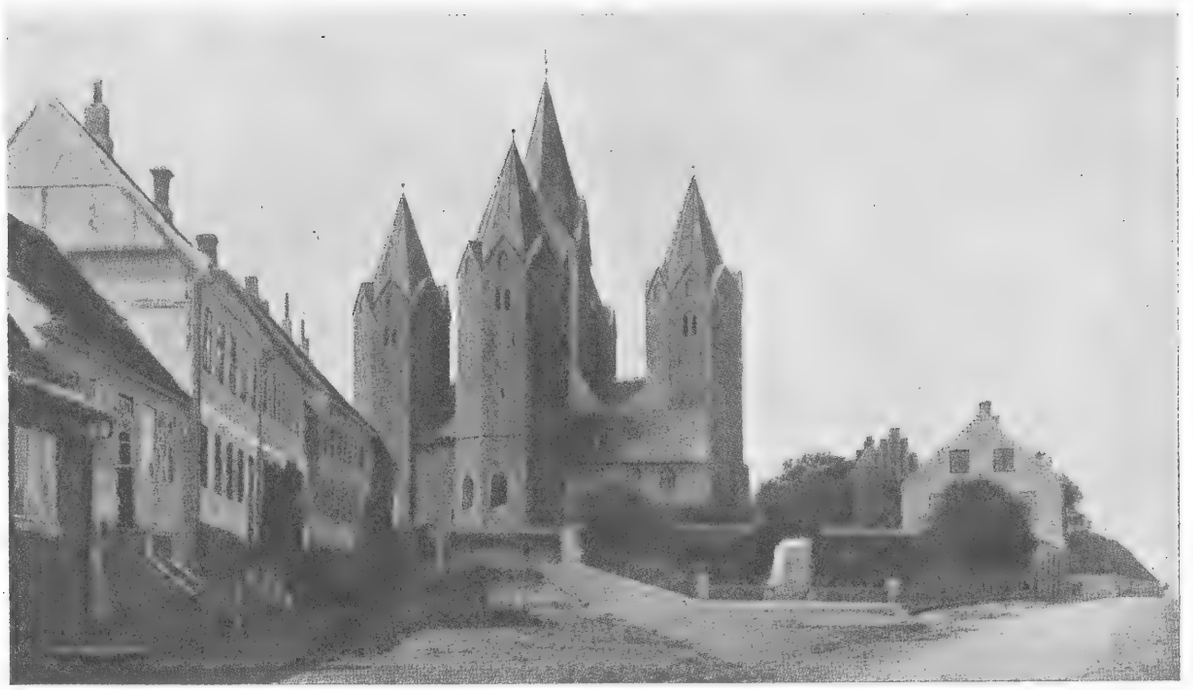
How capital disappeared from the world it is not within my province to relate. Neither can I describe what was the immediate cause for the following very extraordinary dream. Suffice to say in my sleep I awoke one day to find that I possessed nothing—nobody possessed anything. I heard the loud whistle and at once put on my overalls and marched into a large square. I was given a spade and told to dig. I spent the whole day at my work except for an interval of one hour, when food was passed round to us all. It was very good food. At the end of the day I was presented with a card, on top of which was printed the words "Wage Card." Apparently I had earned fourteen shillings that day. I noticed that in the pocket of my overalls I possessed another card which registered the fact that I had earned last week six pounds; but that my various expenses had also reached six pounds, so that I had saved nothing. The card was contained in a complicated wrapper upon which the following was printed and written:

"No. 500. Citizen of London. Married, three children. Weekly wage six pounds. No. 500 is to be clothed and fed, as also are his children and wife, in the classification B. Wherever he may desire to send his children to a school it will be understood by the Education Authorities that they receive the B classification education. He is allowed to receive from the stores in his district two suits of clothes per year, his wife three dresses per year, and his children likewise three dresses." Then followed a detailed list of all the articles of clothing I and my family were permitted to receive during the twelve months. In the case of illness a member of my family was to report at the Central Medical Office and the official doctor would report whether I was fit for work. If in his opinion I was fit, then I had to go to work regardless of my feelings; if I refused my personal allowance of food was reduced; if I persisted I should be forcibly removed and left to starve, nobody being allowed to assist me in any way. Nobody possessed anything wherewith they could help me. Everybody was classified according to the number of children they had. No industrial enterprise worked for a profit. As far as I could understand, nationality had ceased to exist. So much was allowed to each individual for pleasure; if they did not use it the allotted sum was forfeited. Products which I or anybody made after working hours could not be sold, because nobody had any money to buy anything with. Citizen 500 worked so many hours a day and received in return the necessities of life with an allotted allowance for pleasures. I discovered that this allowance was calculated on the number of individuals and enterprises that existed for pleasures. The sum total of these allowances liquidated the necessities needed by those who produced and supplied the authorised amusements. There was absolutely no incentive to work beyond the stipulated number of hours because there was no advantage in doing so. Everybody wore standard clothes. There was absolutely no individuality of any marked degree or great variety to be seen anywhere with the clothing and fashions. As so often happens in dreams, the people around me were all strangers, and I have no recollection of ever having lived in the house which was our home. It reminded me more than anything else of a barn built of concrete and divided and sub-divided into rooms. We possessed only the bare necessities in the way of furniture. Rows and rows of these barns were to be seen from the windows. One peculiarity I noticed was that they could be enlarged by the addition of sections. This enabled occupiers to increase the accommodation as the family needs demanded.

Shops were built somewhat in the style of the Government building in Stamford Street now used for the liquidation of enemy debts. Architecture was dead. There existed no need for beauty. Nothing but the mere production of our daily needs of the simplest character had any value or purpose. The human race lost all personal and individual ambition. My fellow men thought the same as I did, and I could see that my children learned just those things which would supply them with the necessities of life. There was no need to build attractive shops or display manufactured articles in an attractive manner. My clothes were a standard pattern. They were in exactly the same style as those worn by my father. Women had a little more variety, but very little. Everything was designed for comfort and utility. We all apparently were happy. We had no knowledge of any other state of life. For generations the world had lived in this state, and all traces of former conditions had been lost for want of care and lack of enterprise. There was no profit in preserving anything. Nobody could benefit his existence by any personal effort of labour or thought.

WORCESTERSHIRE.—The Highways Committee of the County Council propose the construction of a ferro-concrete bridge and viaduct across the river Avon at Evesham at a cost of £40,000.

Book Notes.

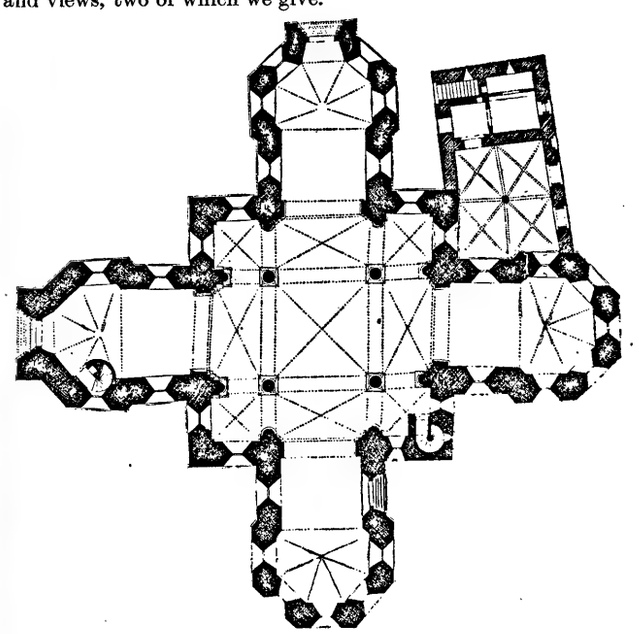


CHURCH AT KALLUNDBORG.

CHURCH AT KALLUNDBORG.

"Kallundborg Church." By Mogens Clemmensen and Vilh. Lohrenzen. Published by the Society for the Publication of Works on Danish Architecture. London: Humphrey Milford, Oxford University Press. 15s. net.

We give illustrations from this monograph of a most interesting and exceptional church situated in Northern Denmark on the shores of a fjord. The church is impressively situated on high ground overlooking the fjord, from which it forms a great landmark. It was built in the second half of the twelfth century, apparently by Esbern, son of Asser, about the year 1170. It is not certain whether he also built the castle where it was found to have stood in the eastern part of the upper town. Tradition says that he planned Kallundborg (castle), but the church was built shortly afterwards and has all the characteristics of a castle church. It is closely related to other Danish Romanesque churches, especially those of Zeeland which were supposed to have been built close to a nobleman's manor house. It is clear that Kallundborg Church was built as the castle church of Esbern Suare for his own private devotions and for his family. The monograph is well illustrated with plans, scale drawings and views, two of which we give.



PLAN OF CHURCH.

"Reinforced Concrete Design." By G. P. Manning, B.Eng. (Hons.), A.M.Inst.C.E. London: Longmans, Green & Co. Price 21s.

This is a distinctly monumental work upon the subject of reinforced concrete, and deals with it not from the class student's platform, but "from the point of view of the engineer designer," and it is interesting to note how far and how often theory and practice seem to differ. In more than one place the author says that speed and accuracy are interchangeable terms in reinforced concrete design, and with this we are not prepared to agree; that it may be desirable to avoid long and intricate calculations may be admitted, *mais c'est autre chose.*

The book is set out in three parts, severally dealing with (*a*) cross sections of structural members and stresses on them; (*b*) design of members; and (*c*) design of structures, with an introductory chapter dealing with the basis of design. The work is freely accompanied by diagrams and tables.

Where a standard notation already exists, one which is

recognised by the leading authorities, it seems a pity that the author should not use it; and it also seems a pity that he should introduce a term such as "encastré" without offering a definition of it; so far we have not encountered it in any other text book.

Here and there we notice slight evidences of want of care, but we do not wish to dwell upon these in view of the evident thought bestowed upon the book as a whole. But let us give this one instance from page 5: "As the area of concrete in tension is to be neglected, the steel must of itself supply all the tension"; of course, the steel is to supply the *resistance* to tension, and not the tension itself.

We would suggest that the cover of concrete (see p. 10) should be stated as being *not less than* ½ inch, for it may certainly be more. With all respect for the author, we should regard Fig. 50 as a cantilever. It is of interest to note, in regard to piles formulæ, the great working difference provided by Saunders' rule and the Dutch rule; the author's answers are, however, not accurate in either case (see p. 343).

These and some other trifling conflicting notes are to be encountered, as also a few compositor's errors, but the work as a whole deserves the praise which it will probably meet from its public.

Some Thoughts on Architectural Education.

By Scrutator.

There are not a few subjects which we regard as hardy perennials, some even as hardy annuals; but in regard to architectural education this may truly be called a hardy diurnal. It is ever present to our minds in some form or another—whether it be by praising the modern tendencies or else by indulging in tender memories of the bygone days and methods.

For my present purpose I should like to take up the very sensible and laudable attitude of recognising the merits and demerits of the two protagonists in this section of education—I refer to the pupilage and school systems. And if I am historical in some of my remarks, it must be accepted as a necessity of the case.

But firstly let me deal with the radical idea—or, to use a suitable terminology, let me examine the foundation of Architectural Education. It must be obvious (but, perhaps, none the less desirably to be stated) that the future of the youth as a practising architect is the beacon of his education in this fascinating branch of Art and Science.

If we lived in a world where money did not exist, nor any substitute for money, the problem "What to do with our children" would be much simplified, though not disposed of. It would still be our duty to educate them to become useful citizens, so that they should contribute their quota of intelligent occupation to the common stock of labour. Accepting that as beyond dispute, I will endeavour to make manifest my views as to the education best fitted for the germinating architect.

And here let me strike a note of warning for the benefit of all parents and guardians, and that is that they should not assume (as is too often assumed) that a somewhat feeble, or even a pronounced, "taste" for drawing is a sign that the youth is a budding Inigo Jones. (*En passant*, too, let me say that as it would be awkward to be writing constantly of "he" or "she," and as we are told that the word "man" habitually embraces woman (and perhaps not only the word), "he" henceforth will be understood to include "she" (or, to be grammatical, "her").

No! it is a fatal error to think that the ability to draw implies the ability to design—or even that the ability to design necessarily suggests a mental calibre which can grasp the scientific and technical acquirements of the successful architect. Perhaps I should modify that last statement to an extent; for there *have* been successful architects who, lacking those acquirements, have secured their success on the business ability to exploit the brains of capable assistants.

So far I have regarded the embryo architect from a somewhat third-personal standpoint, as though the parent or guardian were the dominating factor in the choice of a life's vocation—a mode of procedure that is highly condemnable. Let me suppose that the youth expresses a wish to become an architect—that he occupies his spare moments in drawing plans of impossible houses without visible means of approach to the upper floors, or with equally impossible doors, windows or fireplaces. This youth's aspiration for the joys of the profession is too often on a par with the same youth's earlier aspiration to be a pirate or a butcher or heaven knows what. Aspirations need to be tested by experience before being established irrevocably as facts.

And this brings us at once to the question as to the method or system of education best calculated to deal with the period of probation, from the very practical standpoint of the parental financial capacity. If we are considering the case of the offspring of a wealthy man, some possible waste of money (in testing the capacity or suitability of the youth for the profession) will not be a grave matter. But there are also the men of moderate and of no means, where the waste of money would be a serious factor. And, despite my preference for the pupilage system, I imagine that the expense would be found to be less in the youth's attendance at a School than in his indentures to an architect, in the event of a cancellation or other determination of the project, at any rate, at a rather early stage.

But let us consider another point. With the moderately-well-to-do parent the question will, in any case, be "What can I do for my child so as to equip him for life, and at the same time so to equip him at the least unnecessary expenditure on my part?"

In the old days—and yet, not so old—there was the accredited system of pupilage. By the payment of a certain number of guineas (the exact sum being dependent upon the status or else the assurance of the particular architect) the youth was articled for a period of three or five years, during which it was the duty of the architect—either personally or by means of his staff—to instil into the pupil the principles and practice of his profession. The youngster was to be taught how to make small scale and detail drawings, how to trace drawings, to make perspectives (this being regarded as of great importance in the years that are gone), how to write specifications, make surveys of buildings and of land, prepare quantities and accounts—or, at any rate, to learn as many and as much of these matters as the master's practice provided. What was the result of all this? The pupil, by the end of the term, was (assuming his exercise of intelligence) turned out with a tolerable knowledge of the routine of the profession; he had not, it is true, necessarily become a designer on independent lines, for he had developed his master's ideas, not his own; but his brain had been expanded, and he had lived in an atmosphere which promised well for the development of his own powers of design when the time should arrive. On the completion of his service, the fashion used to be for the emancipated pupil to make the Grand Tour, when his parent could afford it; and he returned home, after a protracted period of foreign study, ready to enter the offices of some architect as a competent assistant, with the eventual purpose of starting in practice for himself.

Such an education as here shadowed forth might cost in those days anything from £500 to £600; or where the foreign travel was omitted, and the most expensive architect was avoided, a sum of, say, £300 to £350 might be involved. Of course, these sums must only be regarded as illustrative, as different circumstances might exist to vary the expense considerably in either direction.

But what about the man with no particular means whose child desired to be an architect? A premium of, say, 200 or 300 guineas might be as impossible as one of 500 guineas. And, even so, the gates of Paradise were not of necessity shut against the youthful Peri (let us forget the limitations of sex for the moment), who might enter

an architect's office as an office sizar, so to speak, receiving a small salary (probably, in those days, called a wage—and why not?) to be generally useful, and with the understanding that he might keep his eyes and ears open to pick up what knowledge he could. From time to time he would be entrusted with a drawing to be traced or an original drawing of some simple nature to be made; he would ask questions, and he would probably keep a commonplace-book. He would be also given specifications to copy, and in slow process of time he would be raised from the status of office boy to that of junior draughtsman, thus getting his first step on the ladder leading to success. I have known (as many must have known) such cases, both in London and the provinces, with at times brilliant results.

Alternatively, and desirably, a lad could enter a builder's yard at a wage, and learn by degrees the practical side of an architect's duties, and could supplement his day's labours by attendance at a night school—a very different affair from the present technical institutes. In centuries long gone by, architects sometimes developed from the workshop of a goldsmith.

But how far removed all that sounds from the present day with its Schools of Art, ateliers, and College and University schools of Architecture! The glories of the pupilage system are fast vanishing, and I fear that, long ere the dawn of the twenty-first century, pupilage will have become altogether historic.

It is not that I would decry the school system, though I may profess a greater belief in the pupilage-plus-evening-class method. When I was a young man, articled in London, there were three great alternatives to supplement the day's work; these were the Architectural Association, the classes at University College and those at King's College. Various art schools were arising, but they were more in a chrysalis than a developed stage. The Architectural Association was a very different proposition then to what it is now. I remember it when it occupied two rooms on the top floor of No. 9 Conduit Street, and when its classes were confined to the evening hours, and when fees were small and well adapted to those comparatively impecunious youths. Nor was the instruction any the worse in that it was given gratuitously by practising architects. Members of the profession have ever been generous in giving of their acquired knowledge for the benefit of zealous seekers in the same field. And even if the other resources for classes cost more, at least the fees were kept within bounds.

And what was the result of all this? Were the resultant architects less brilliant than those turned out of the present-day mill? Has the modern system of first to fifth years, of ateliers and *esquisses* and *projets* and fancy backgrounds (so worked up as almost to kill the plan of the building), has all this provided more Wrens than the old system of mutual help and of gratuitous assistance?

As a parent of moderate means, let me ask which is the better course for me to pursue with my son and daughter, both desirous of entering the profession made illustrious to them by their father's adherence to it? Is it better to give, say, 200 to 300 guineas for three years' pupilage with some well-known architect, and devote, say, another 50 to 100 guineas to the special evening education of each child, or is it better to pay (as at the Bartlett School of Architecture) some £300 or (as at the Architectural Association) some £350 for a five years' course, missing the benefits of such practical information as is obtained in an architect's office? I grant that the environment of the School has its advantages, but I think that it is of less importance than the environment of an architect's office, with the concomitant advantage of practical visits to works in progress, with the attached duty of reporting thereupon to the architect.

Another advantage accruing to the Schools is the greater catholicity in design therein imparted; Scott's and Street's pupils must, for the most part, have been insensibly biassed towards Gothic, as Soane's pupils would be towards Classic, whilst the Schools possess all the breadth of unfettered browsing amongst the various styles.

But, even so, many architects of quite high standing preserve an open mind as to "Styles," being satisfied with "style." My own Chief was "everything by turns and nothing long," though I do not suggest that he was at any time a "buffoon"; Gothic, Dutch, Old English domestic, Renaissance—all were the same to him in the big practice which was his.

It is, to my mind, a big fault in the Schools that they indulge so largely in the designing immense schemes; there is a failure to observe the practical restrictions that everyday conditions provide. But in regard to the scientific education of the student, I consider the Schools take precedence.

The fact that the Diploma course of the Schools will equilibrate most of the Royal Institute's Examination series will appeal, of course, to those who believe in working for examinations; but, even so, let us remember that no mere diploma will provide work for the passing day's needs, and the parent will still have to support the aspirant during the weary years of waiting.

And furthermore we must remember that whereas the pupilage system only moderately increases the numbers of those in the ranks of the profession, the Schools turn out a lot of highly trained young men, for many of whom there cannot be work in view, either as assistants or as principals. It becomes almost a matter of "taking in each other's washing."

On the whole, then, give me for my son and daughter, and for other people's sons and daughters, the good old pupilage system. Even should it prove somewhat more costly (though here, too, I have my doubts), it is at any rate worth the extra money by reason of its greatly increased practical value.

The Housing Problem.

The Consultative Committee of Women's Organisations, 92 Victoria Street, Westminster, have brought out a pamphlet in which they suggest the following interesting subjects for discussion.

PART I.

SECTION A.

1. How have the working classes in your district been housed during the past 50 years? What are the good points and bad points of the new houses, of "made down" houses, and of tenement buildings, etc.?

2. If you were offered for the same rent the choice of three rooms in a "made down" house in a wide street, a three-roomed flat in a block dwelling with a bare courtyard below, or a small self-contained working-class house in a narrow street, which would you choose, and why?

3. A railwayman, earning good wages and who has saved a bit, his wife and four children want a house. They are trying to decide whether to apply for a new municipal house at 15s. rent, to borrow money from a Building Society to build a house for themselves under the Small Dwellings Acquisition Act, or to join a Public Utility Society and live in a house constructed with their assistance. How would you advise them?

SECTION B.

1. "One family, one dwelling, and every family a dwelling." Do you think that this ideal is attainable, and if not, what could be done immediately to improve housing conditions?

2. What are the main reasons for the shortage (a) generally, and (b) in your own district? Suggest reasons for the cost of building being unusually high (or low) in your village.

3. Show how bad housing affects health and conduct and give any results of over-crowding known to yourself.

4. Give an example known to you—
   (a) of hardship incurred by the owner of a house who cannot get possession,
   (b) of hardship incurred by a tenant who is threatened with eviction.

PART II.

1. What are some of the chief obstacles in the way of rapid house building?

2. Criticise the Government's new proposals and give your own views as to how the shortage may best be met.

3. What is an "economic rent"? Which is the better policy: an all-round increase in wages, or a Government subsidy towards rents?

We should be interested to hear the results ascertained by answers to these enquiries, which are very much to the point.

Lethargy.

There are many forms of lethargy: that which overcomes many after a banquet, that which assails those whom misfortune and disappointment deprive of hope, and that which seems to be the normal condition of many of our fellows. To these may be added the national lethargy which seems to have enveloped many since the termination of the Great War. But most of the forms of lethargy we have alluded to are of temporary duration, and is it not time that we should rouse ourselves from the methods of thought from which we have suffered since the war? It is true that an interlude of spurious activity immediately followed on the war, inspired by hopes which seemed to us to rest on no solid foundation. It was supposed by many that in some mysterious manner harassed and nearly bankrupt nations would afford great markets for our goods: it was supposed by many that, in spite of being really far poorer, they could spend more lavishly, and that a market could be found for goods whatever their price amounted to.

The exceptional habits learned during the war, that cost need not be considered and that waste was unimportant, were applied to what should in reality be a period of careful and conservative reconstruction, with the result that recovery from what may be called the disease of war has been retarded. The public regrets the good old pre-war days without making an organised effort to attain to a similar standard of well-being, an effort which is absolutely necessary if this country is to maintain the condition which it acquired.

Success in war depended on organised effort directed towards one end, but it would almost seem as if, that effort made, we had embraced another set of ideals, thinking that common action directed towards one end is unnecessary for the national well-being.

Trade disputes have followed one another in quick succession, we have seen the costs of production maintained and production itself reduced, while in most occupations wages are far higher than ever before without any real advantage accruing to the individual worker. A determination both to limit the hours of work and to maintain the rates of wages paid, producing under Trade Union conditions a limited and diminishing output, is placing us at a disadvantage wherever we come into contact with the activities of other nationals.

Taxation to provide relief for the large and growing body of the unemployed is another factor which adds to the cost of production and diminishes profits. So we are bound in an evil circle of difficulty, which with every revolution of the wheel of time tends to increase difficulties which are more and more insistent.

Yet we are unable to discern in the public press anything but acquiescence in acceptance of conditions which are, we hold, abnormal or else a species of spiritless pessimism for which it seems there is little justification.

The whole position might be quickly changed for the better if we could only instill into the public the belief that it is useless to work for the benefit of any one section of the population independently of others.

Architects have their own nostrums as to the right methods by which their private interests may be best advanced, but whatever means they may adopt will be of little moment if conditions are such that a diminishing section of the population have the means or inclination to build.

The building trade operatives will not be benefited by higher wages and shorter working hours if there are few people who can afford to carry on building projects. Contractors may revise their rates and methods in the endeavour to secure united and unanimous action, but they again will be little benefited if the general public is not able or willing to build.

In the coal industry the miners have secured agreements under which all but a small percentage of the total costs go to them in the form of wages, and the working hours are shorter than they are abroad, but such conditions are useless to the collier if they result in giving other countries trade which once seemed securely in our hands, and the net result of the policy pursued is simply to make large additions to the ranks of the unemployed and to render it necessary to shut down many pits.

The high cost of coal means the high cost of all manufactured goods for the production of which it is a necessary factor, and again means that we lose markets and promote unemployment.

It may be argued that unemployment is not an unmixed evil for those who can depend on the payment of doles, but it can readily be demonstrated that such payments must before long end, for the accumulated wealth of the country produced under better conditions cannot indefinitely bear the strain of the demands made upon it. Our shipping trade, which was largely made possible by the export of coal, is in a bad way now that foreign markets are being captured by our trade competitors, and another great industry is hard hit.

The tendency to invest liquid capital abroad where it is more lightly taxed is one which deserves the attention of all parties in the State.

It should be possible to demonstrate to the satisfaction of everyone that capital, whether possessed by the State or by individuals, is a necessity for the well-being of the community, which depends upon it even for the payment of doles to the unemployed. It should also be possible to demonstrate to them that it is useless to produce goods for which no market can be found because of their cost. It should be possible to demonstrate to every class that sectional prosperity can be of short duration unless it is the outcome of a greater national prosperity, and that the much envied capitalistic class spend far more on wages than they do on luxuries and do not make a shibboleth of an eight hours' day, nor do they stand out for a fixed percentage of profit. It should also be possible to demonstrate that money paid away in taxation is money deducted from the fund which is available for the payment of wages, and that most of the alleged aims of Labour are illusory. No sane man would grumble at having to pay labour three times its present wages if a profit could be made on the transaction, but no one can afford to pay labour even insufficient wages if, after so doing, it can only be employed at a loss. We have mentioned what seem bald truisms, but if these truisms were generally understood and acted upon there would be few disputes and a revival of general prosperity would soon take place. Nearly all of us want better conditions, but a minority only recognise that we can only ensure them by our own efforts, and it should not surprise us if the most able of politicians has been unable to create improvements which can only come automatically from our own efforts when we have discarded the selfish fallacy that we can obtain them at the cost of someone else.

But we have hope that the clouds which seem dark around our national life will sooner or later pass away with the realisation that we are all component parts in the national machine, and it is impossible to make that machine do its work properly by giving undue attention to some of its parts to the neglect of others.

It would be regrettable if we had to think that those who gave their lives in the war included all of those who had unselfish thought for their country and had left behind them only the more ignoble and selfish in the nation.

BEDFORD.—A site at the Elstow housing estate has been scheduled for the purposes of a new elementary school.—In connection with the extension of plant and buildings for the electricity department, a loan of £78,000 has been sanctioned.—Plans passed: Alterations, Girls' High School, for Mr. G. P. Allen on behalf of Governors of Harpur Trust; alterations, Bridge Hotel, for Messrs. Usher & Anthony; additions, Workmen's Club, Russell Street, for Mr. E. H. C. Inskip.

WARRINGTON.—Mr. S. P. Silcock has been appointed architect for the Lymm generating sub-station.—The Borough Surveyor has been instructed to invite tenders for the erection of a further 54 houses on the Reynolds Street site according to any system of construction which the tenderers may desire to submit, including construction in concrete.

The Tomb of William Courten at St. Mary Abbotts, Kensington.

In the first part of Bowack's "Antiquities of Middlesex" (1705)—a publication which, had it been carried beyond its second part, would have formed an invaluable handbook to our older monuments—is an account of a tomb of which the relics exist, forlorn and mutilated, just inside the north porch of St. Mary Abbotts. Few who see the poor remains are aware that they represent the only work of its class by the celebrated sculptor Grinling Gibbons between Westminster Abbey and Fulham; nor is the tablet scheduled among the monuments belonging to the church.

What that work was like before the church was rebuilt we learn from Bowack. "At the South East Door"—he is speaking, of course, of the old parish church—"stands a most stately and Beautiful Monument of white Marble; over the Grave is a Tomb about 6 Foot long, 3 Foot broad, and about 3 Foot and an Half High, over that end which joyns to the Church are several neat Performances in Carving, about Six Foot higher than the Tomb, as an Urn, Festoons, &c. Also a Drapery very loose and natural, supported by Two Boys, upon which is the Performance of Mr. *Gibbons*, and could not cost less than 130 *l.*"

Bowack's grammar is weak, and does not make it wholly clear whether the whole monument or only a part was Gibbons's work, but as in no other work of his is the responsibility divided, and as, when it was erected, he was at the height of his reputation, we may fairly look on the whole as his design, even if the tablet with the Boys and Festoons, all we have left, were the only part he carved himself.

This imposing monument was erected in memory of his friend Courten by no less a person than Sir Hans Sloane, the founder of the British Museum, then plain Hans Sloane, M.D., who indeed had sufficient cause of gratitude, since Courten left him his collections, now divided between the British and the Natural History Museums. The inscription on the monument, written by Sloane himself and now for the most part illegible, is so interesting that we give it in full, together with Bowack's admirably racy translation:—

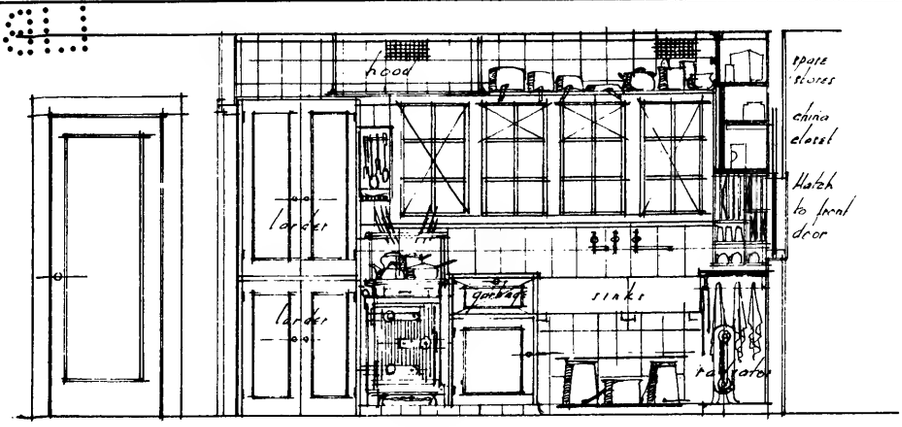
Juxta hic sub marmoreo tumulo
Jacet GULIELMUS COURTEN, *cui* Gulielmus *Pater*, Gulielmus *Avus*,
Mater Catharina Johannis *Comitis de* Bridgwater *filia*,
Paternum vel ad Indos praeclarum Nomen,
Qui tantis haudquaquam Degener Parentibus,
Summa cum Laude vitae decurrit tramitem;
Gazarum per Europam Indigator Sedulus,
Quas hinc illinc sibi partas negavit nemini;
Sed Cupientibus Exposuit humanissime,
Non Avarae mentis pabulum, sed Ingenii,
Si quid Natura, si quid Artis Nobile
Opus, id quovis pretio suum esse Voluit,
Ut Musis Lucidum conderet Sacrarium:
Ast Mortis haec non sunt Curae!
Hic Musarum Cultor tam Eximius,
Hic tam insignis Viator,
Obiit, Quievit 7 *Cal.* APR. *A.D.* 1702.
Vixit Annos 62, *Menses* 11, *Dies* 28.
Pompam, quam vivus fugit, ne mortuo fieret, testamento Cavit,
Sed hoc Qualecumque Monumentum,
Et Quam potuit Immortalitatem,
Bene merenti Maerens dedit
Hans Sloane, M.D.

Bowack's translation is as follows:—

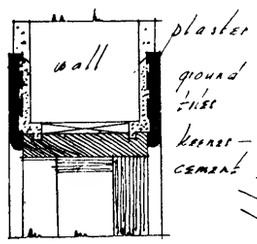
Near this Place under a Marble Tomb
Lies WILLIAM COURTEN, whose Father and Grandfather were *Williams*.
His Mother CATHARINE was Daughter to *John Earl of Bridgwater*.
His Father's Name was among the Indians known,
Who, not unworthy of so great Progenitors,
With highest Praise ran through the stage of Life;
He was a diligent Searcher after Treasures in Europe,
Which here and there being gather'd, he deny'd to none,
But with a Bountiful Hand bestow'd on all that sought them.
He was not of a covetous, but liberal Temper,
If any Work appear'd curious for Art or Nature,
That he purchas'd and made his own,
Which he devoted to the sacred Muses.
Such Gifts as these survive Even Death.
—This so great Favorite of the Muses,
And so Eminent a Traveller,
Rested from his Labours the 7th of the CALENDS of APR. A.D. 1702.
He liv'd 62 Years, 11 Months, and Twenty Eight Days.
Pomp, which he hated living, by his last Will he forbad to be paid him Dead;
But this Monument (such as it is),
And such Immortality, as can be given
To a well deserving Friend, with grief is offered
by HANS SLOANE, Doctor of Physick.

William Courten (1642-1702), of whose activities there is a brief and poor account in the "Dictionary of National Biography," was an extraordinarily interesting figure in the life of his time. His father, a Huguenot by descent and a merchant prince who lost his fortune partly through the depredations of the Dutch upon his ships and partly through the loss of trade occasioned by the Civil War, married the daughter of the first Earl of Bridgwater, and Courten's birth coincided with his father's misfortunes. But enough money was left to give the boy a liberal education, and his first and characteristic appearance in history is as a benefactor to the Tradescant Museum at Oxford, the earliest in this country. In early youth he went to the University of Montpelier, where he met Sloane and formed a lasting friendship founded, apparently, on the botanical tastes common to both. In 1663 he returned to England, petitioned the King on the matter of his father's property and the recovery of his losses from the Dutch, which were estimated at £163,400; made good part of his claims, secured an income for life, and retired to Northamptonshire, where he spent nearly six years with his aunt, Lady Knightley of Fawsley. In 1679 he made a communication to the Transactions of the Royal Society on the effect of poisons on animals, founded on observations made in the course of a second visit to Montpelier, where he came to know John Locke, and in 1684 returned to England, took a large suite in the Temple, and filled ten rooms with the contents of his Museum, gathered in part by himself, in part by friends such as Sloane. The contents were valued at £8,000 by one so well qualified to judge as John Evelyn, who records no fewer than three visits in his Diary. He describes it as "such a collection as I had never seen in all my travels abroad—either of private gentlemen or of princes. It consisted of miniatures, drawings, shells, insects, medals, minerals, all being very perfect and rare of their kind; especially his books of birds, fishes, flowers, and shells, drawn and miniatured to the life. He told us that one book stood him in three hundred pounds." Visitors flocked to see the first Museum opened in London, and in 1695 another diarist, Ralph Thoresby, recorded his impressions. What struck him especially was "the most noble collection of natural and artificial curiosities, of ancient and modern coins and medals," especially those of Imperial Rome.

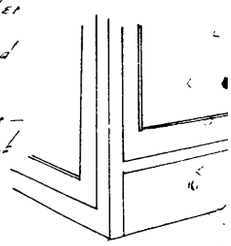
Such a collection was of extraordinary value, and, by giving it to Sloane, Courten secured its continuance in a way he little dreamt of, since the foundation of the British Museum fifty-seven years after his death fulfilled the dream of Sloane, much of whose richest material, scientific, historical and artistic, was derived from his friend's bequest. Courten was in truth a national benefactor, both in his lifetime and after it; his liberality is nobly praised in his friend's epitaph; his tomb—all that is left of it, that is—is left to moulder and decay. It is an unworthy return on our part for a life spent in the service of science and his fellow men and a memory perpetuated by his own collections, though these now bear the name of his friend Sloane.



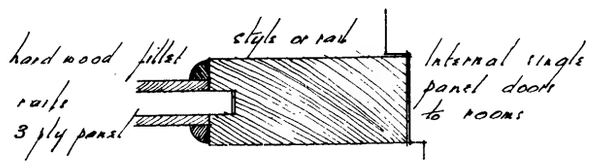
SECTION A·A

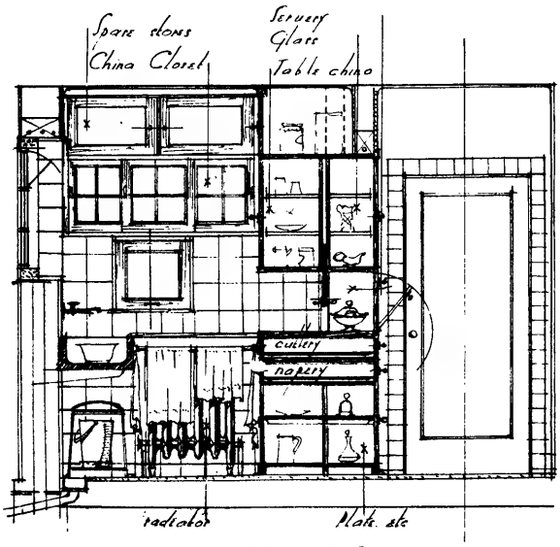


Tile Architrave round doors

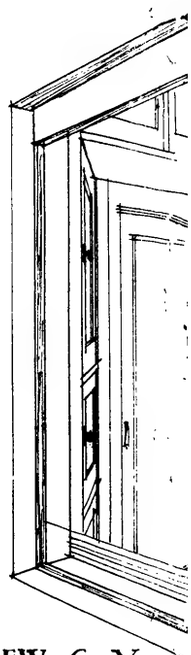


VIEW from X





SECTION C·C



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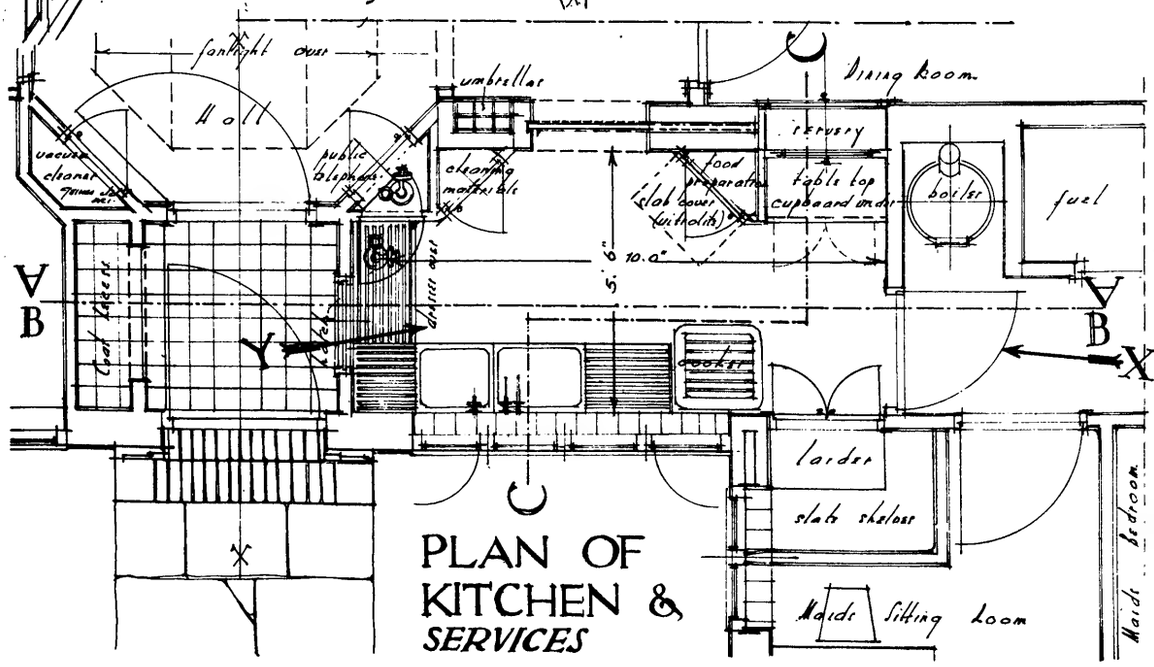
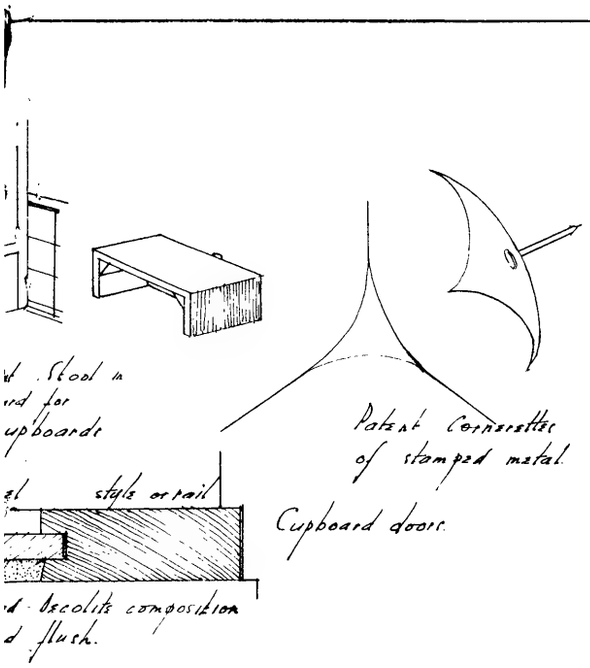
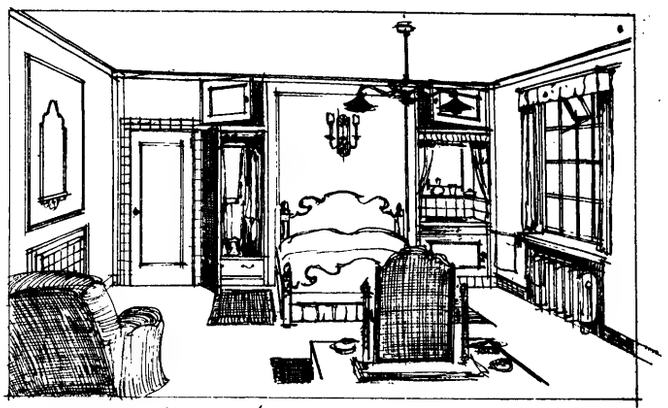
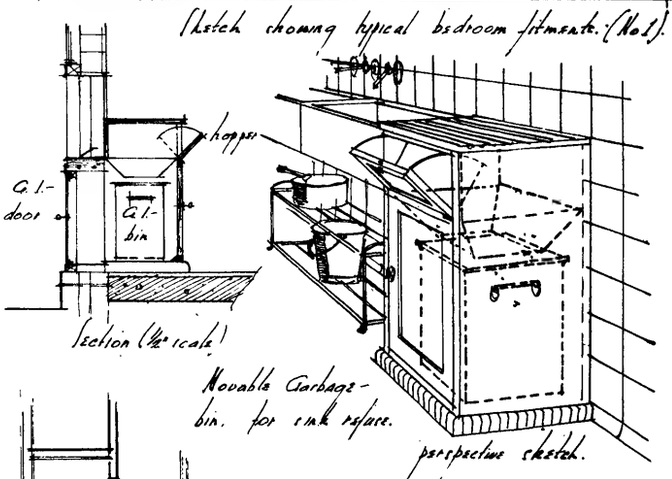


PLAN OF KITCHEN & *SERVICES*





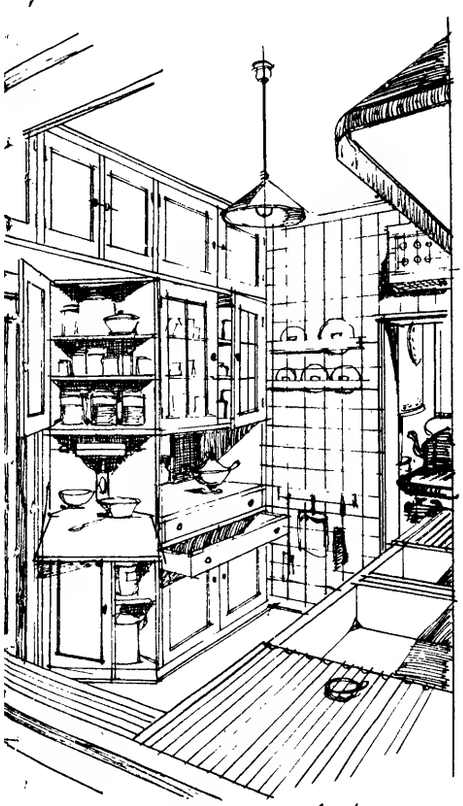
Sketch showing typical bedroom fitments. (No 1).

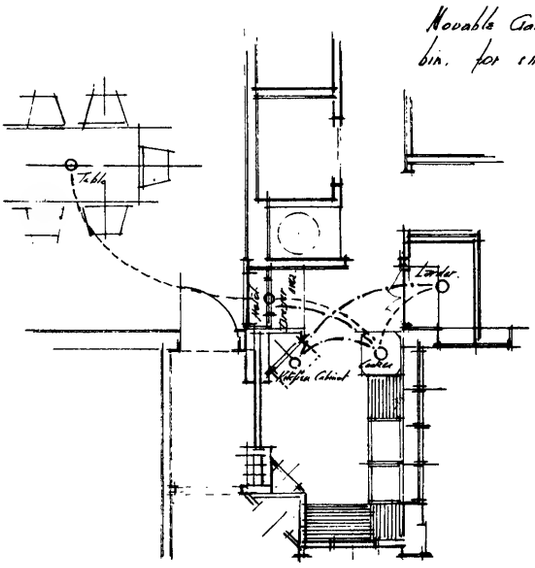


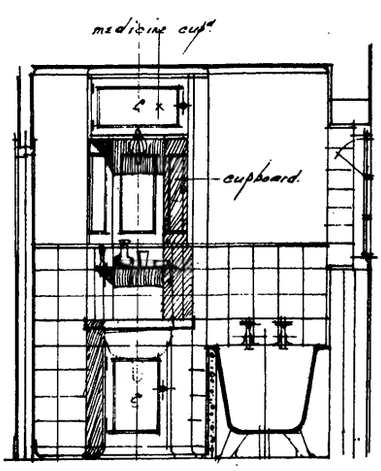
Section (Full scale)

Movable Garbage-bin, for sink refuse.

perspective sketch.







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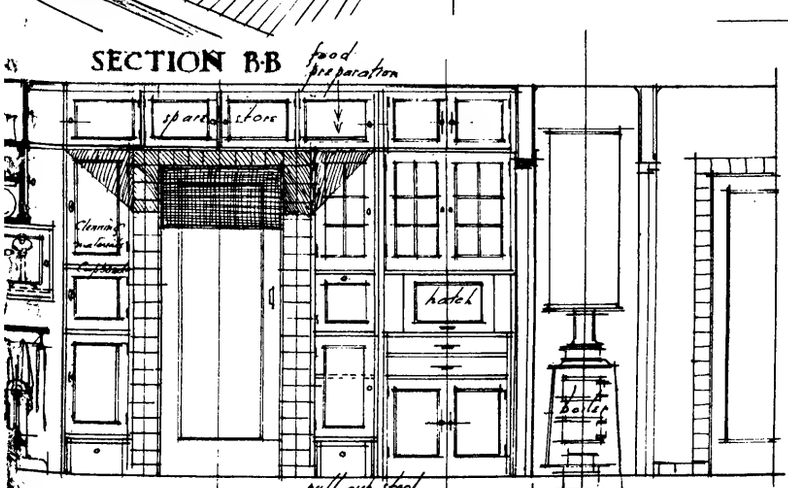
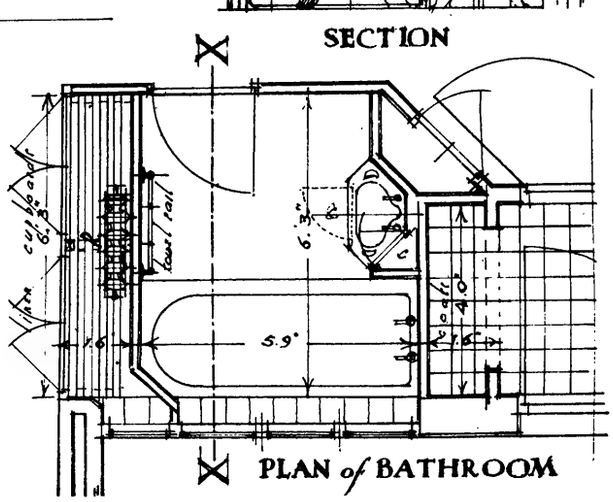




PLAN of BATHROOM

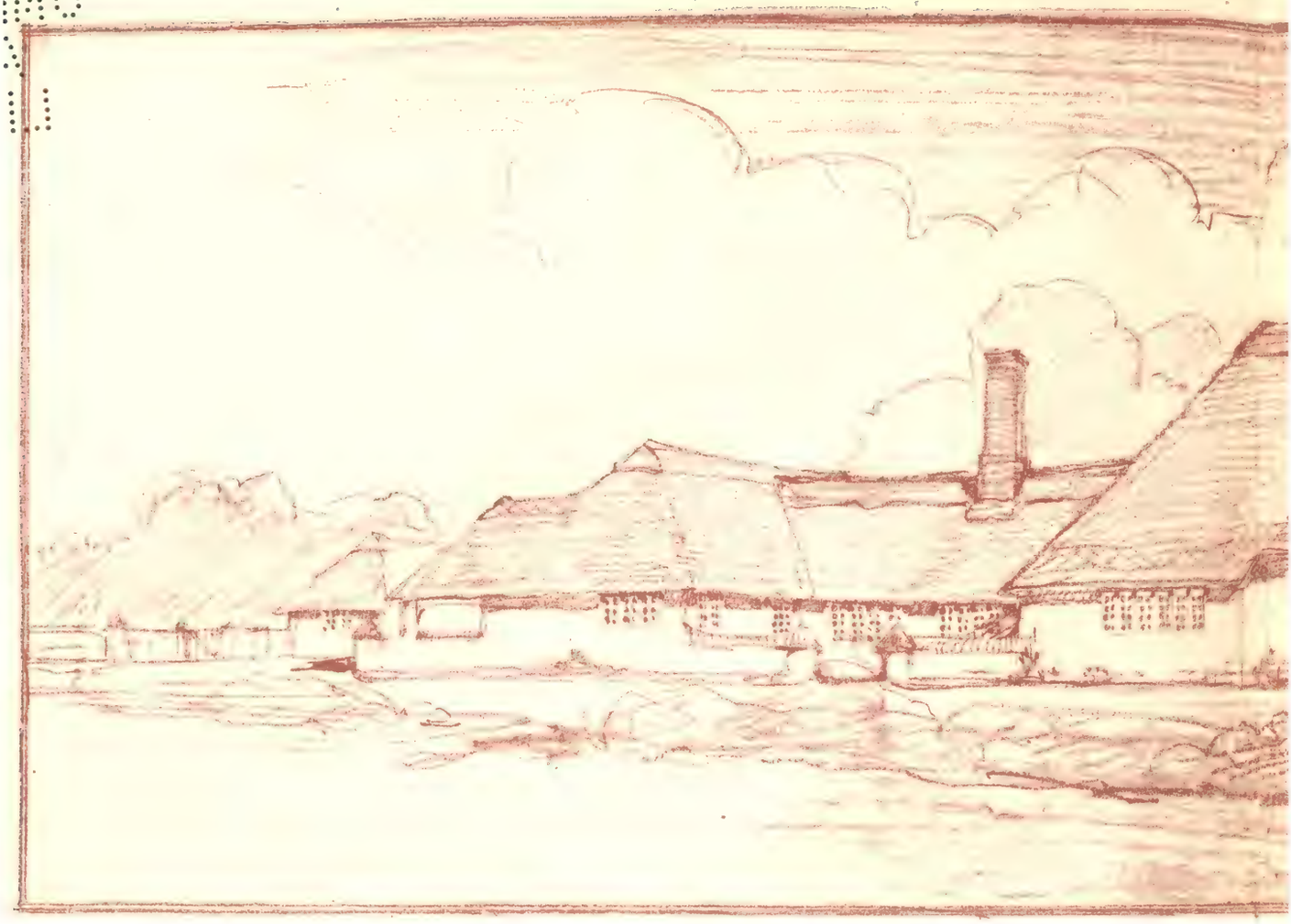
"PHOTO-LITHO" WM BROWN & CO. LTD. LONDON, E.C.2.

E. BUNGALOW NEAR HALSTEAD.

H. ARCHITECT.

"INK-PHOTO" Wm BROWN & CO. LTD. LONDON, E.C.3.

ROADSIDE BUNGALOW NEAR HALSTEAD.



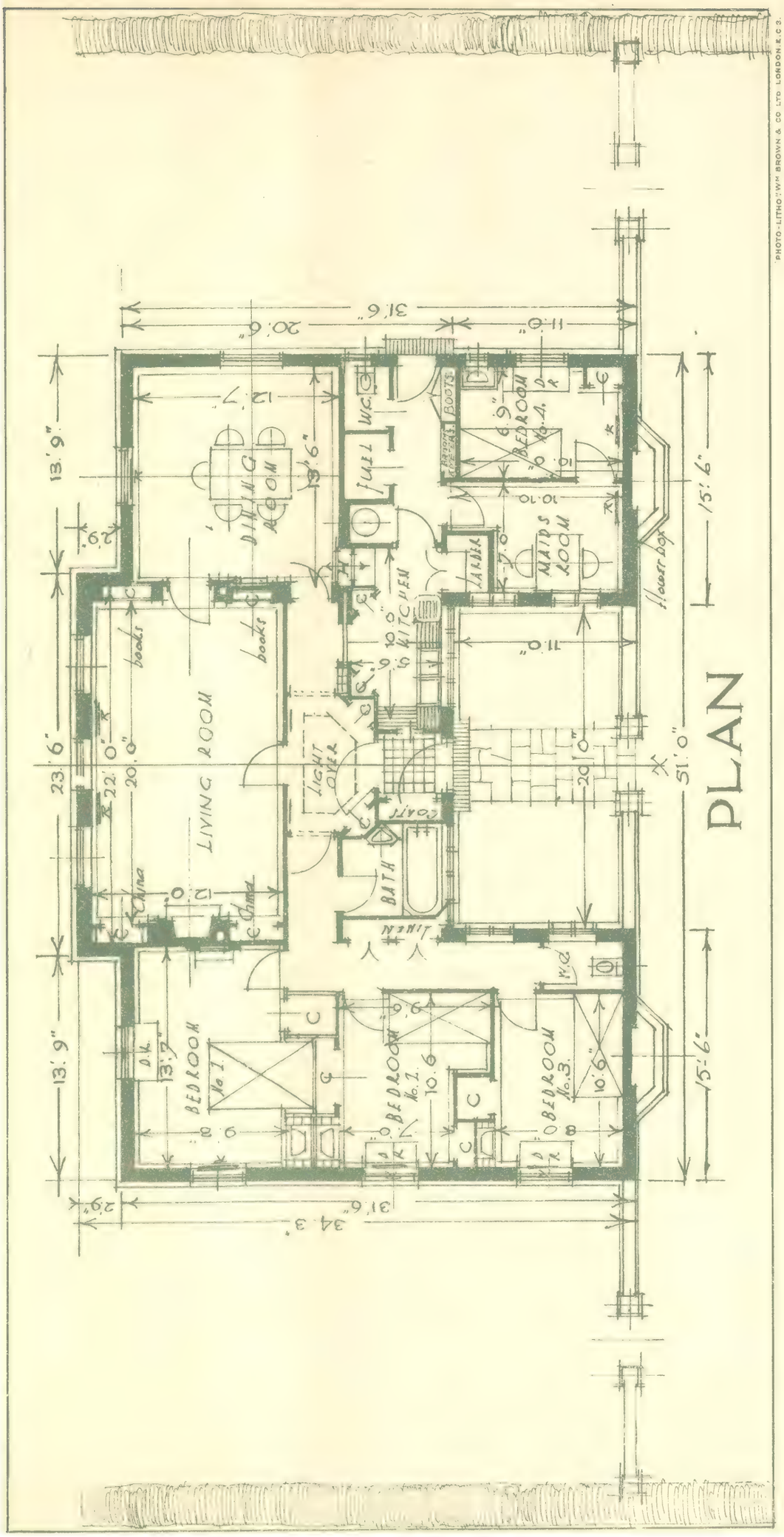
HOUSE NEAR MELTON MOWBR

P. D. HEPWORTH, Arc

"INK-PHOTO" WM BROWN & CO. LTD. LONDON, E. C. 3

VBRAY, LEICESTERSHIRE.

I. ARCHITECT.



ROADSIDE BUNGALOW NEAR HALSTEAD.

P. D. HEPWORTH, ARCHITECT.

PHOTO-LITHO: WM BROWN & CO LTD LONDON, E.C.3.

Correspondence

[The Editor will not be responsible for the opinions expressed by Correspondents.]

The Russian Agreement and British Trade and Finance.

To the Editor of THE ARCHITECT.

In the opinion of the Federation of British Industries the draft Treaties recently negotiated between representatives of His Majesty's Government and of the Union of Soviet Republics are not of such a character as to promote British trade with Russia, or to restore satisfactory commercial relations between the two countries, contain articles calculated to prejudice British commercial relations both with Russia and other countries, and in general represent a surrender of rights and principles which are essential to the welfare of British industry.

They therefore trust that these draft Treaties will not be ratified.

In particular the F.B.I. consider in regard to

I. THE GENERAL TREATY.

(*a*) That the arrangements contemplated in the Treaty for the settlement of debts contracted by previous Russian Governments and for the compensation of British subjects who have suffered in person or property, represent a substantial surrender of British rights for no adequate return and are not of a character to restore the confidence which is essential to the resumption of active and healthy trade relations;

(*b*) That the "recognition" by His Majesty's Government that "the financial and economic position of the Union renders impracticable the full satisfaction of the claims" is not in accordance with the facts.

To "recognise" that a Government which controls a vast territory capable of almost limitless productive development, and containing some of the largest and richest agricultural and mineral areas in the world, can never satisfy in full claims which are infinitesimal in relation to its potential wealth is an obvious absurdity.

The utmost which should be conceded by any British Government on this point, is that the present economic position of the Union renders immediate payment in full of all British claims impossible, and may necessitate some arrangement for a partial moratorium pending the restoration of fuller industrial and commercial activity in Russia. To admit more than this is to prejudice future negotiations and to betray the legitimate British interests.

(*c*) That in the present circumstances, when the country is burdened with a heavy internal and external debt, the wisdom of any proposal to guarantee a loan to a foreign power and thus impose a possible further liability on the British taxpayer and through him on British industry, would be a matter of the most serious consideration, even if all the circumstances were favourable, the borrowers' credit good, the proceeds earmarked for development purposes, and the material required to be purchased exclusively in this country. When it is proposed to guarantee this loan to a Government which professes to be unable to meet its existing obligations, and when, in the same document in which they propose the loan His Majesty's Government "recognises," however erroneously, that this profession is correct, the proposal becomes merely fantastic.

Any attempt to put it into force could only prejudice our relations with other debtor countries and impair our reputation for sane and responsible finance.

II. THE PROPOSED TREATY OF COMMERCE.

(*a*) That if the provisions in Article 2 are intended to confer on the persons suggested full diplomatic immunity in the sense in which that term has hitherto been construed by international usage and, as far as this country is concerned, by statute, the Treaty will not only create a new precedent of a very undesirable nature, but will give these persons a privileged position which will confer on them substantial advantages in competition with other traders, both foreign and British, and may in certain circumstances effect detrimentally the interests of any British firm entering into business relations with them. If, on the other hand, this Article is not intended to create such a position, it appears to be meaningless and unnecessary;

(*b*) That the Treaty fails to secure to British subjects the facilities, rights and privileges necessary to enable them to carry on legitimate trading activities in and with Russia, while in practice owing to our existing Treaties with other Powers it confers such rights and privileges in full on Russian subjects trading in Great Britain, and in addition creates a specially privileged position for the Soviet trade organisations.

In conclusion, the Treaties do not appear to contain any proposals calculated in practice "to extend and develop the commercial relations between the two countries," to place them "on a firm, just and durable basis," or "to remove all causes of friction and disagreement." On the contrary, they not only involve substantial concessions from His Majesty's Government which, *inter alia*, involve a serious sacrifice of the rights and interests of British subjects and embody financial proposals of a radically unsound character, but by the vague, inconclusive and impractical character of the arrangements proposed for the settlement of Russian debts and compensation, and by the number of the vital questions at issue between the two countries which are left for further consideration, they actually create fresh causes of probable friction and disagreement.

Yours faithfully,
SIDNEY ROGERSON, Publicity Manager.

Building Progress.

Amongst other notable London churches designed by Nicholas Hawksmoor is the parish church of Spitalfields (Christ Church), one of the fifty churches erected under an Act of Parliament passed in the reign of George the Second. As a parish church it is certainly impressive, but it errs on the side of coldness in appearance. Just now it is undergoing renovation of the stonework by Mr. E. A. Young, and Messrs. J. Pritchard & Son have in hand the general repairs and decorations. Besides Hawksmoor, other architects who have been concerned in alterations and improvements to the church are Ewan Christian and Samuel W. Iron.

No. 112 Strand, for the rebuilding of which Messrs. Ford & Walton are engaged, is having the steelwork supplied by Somerville-Barnard, Ltd., and Express lifts are to be installed.

In our issue of August 22 last we gave some particulars as to the rebuilding of Nos. 72–78 Fleet Street, which we can supplement to the following extent: Mr. C. H. Mabey is undertaking the stone carving; Siegwart Fireproof Floors are being used; and Moreland, Hayne & Co., Ltd., are supplying the steelwork.

Tower Chambers, at the junction of Moorgate with London Wall, is an important block of premises whose stonework is at present undergoing renovation by A. Dreyfus, Ltd., by means of Tabards Metallic Stone.

Messrs. Bridge & Co. are making extensive alterations to Messrs. Wallace Hughes' important business premises in Tunstall Road, near the Bon Marché, Brixton. Parnall & Co. are the shopfitters engaged. And not far distant Mr. James Byrom is about to erect a block of houses in the main thoroughfare.

Banking premises at the junction of Streatham High Road and Stanthorpe Road are receiving attention at the hands of Messrs. Rice & Son, the electrical work being undertaken by Messrs. Locke & Soares.

Other works now in hand at Streatham include: (ii) alterations to Nos. 226–228 High Road, by Lyne & Son, with Stanley Jones & Co., Ltd., for the shop front fitting; (iii) W. A. King & Sons, large extension to a garage depot at No. 47 Streatham Hill; and (iv) a block of four shops and garage at the junction of the High Road and Wyatt Park Road, where the electric wiring is being carried out on the Henley system by the County of London Electric Supply Co., Ltd.; we understand that Mr. J. Cook is the builder.

We referred recently to a very old benefactor of London, by name Rahere; to-day we would make mention of yet another benefactor of a less remote period, and this time we are referring to Edward Alleyn, the founder of Dulwich College. This foundation owns a good deal of property in that neighbourhood, and at the present time the Governors are at once doing a patriotic service and one of financial profit to the charity in erecting a large number of middle-class dwelling houses on the Woodlands Estate at Dulwich, close to the College precincts. These houses are two-storeyed and semi-detached, and are being erected by Messrs. Courtney & Fairbairn. They are of varied architectural design, and should, at least in some instances, gradually harmonise with their surroundings. The garden work, including the crazy footways, is the work of Mr. J. T. Preece, the front boundaries showing dwarf brick walling (with slag bricks), timber posts and iron chains. We understand that Mr. J. T. Jones is the architect.

An extensive row of lock-up shops is being erected at the junction of Norwood and Dulwich Roads opposite Dulwich Park (by the railway viaduct). Mr. G. W. Riley is the builder.

Fifty Years Hence.

The greatest contrast between the architecture of 50 years hence and that of to-day will be the absence of the outcome of dogmatic theory as to forms. The greatest architectural writer up to 1924 will be considered to be Geoffry Scott, not because he made out a brilliant justification for the architects of the Baroque period, but because he clearly and definitely cut himself free from the trammels of those who tried to apply moral standards to problems of form and colour. It will be clearly recognised that the employment of architectural form has for its primary object the intention to please, and that no rigid canons can be laid down as to the exact measures to be employed to secure this end. Many architects in 1924 thought that by omitting customary mouldings and eschewing customary decorative devices they were marking out a new and better way, but in 1974 their efforts will be regarded as being like the speech of an educated man who employs a provincial vernacular in place of scholarly English. In 1974 it will be understood that as improved methods and machinery make it possible to produce what was formerly considered as being elaborate work with little or no increase of cost, it would be absurd to limit expression by adhering to bald and crude forms. It will be recognised that a design is an abstract expression of form, good or bad as it serves its dual purpose of providing the required accommodation in a suitable manner and being pleasing to the eye. The architect of 1974 will neither strive to express construction nor to conceal it, but, having arranged the component parts of his design suitably, will give it the form he considers most pleasing. In 1974 architects will be well versed in the uses of steel and reinforced concrete, but will have passed the stage in which it was expected that the newer forms of construction would much influence design. They will have outgrown the tendency to believe in a new revelation of design to be met half-way by weird and original efforts on the part of individual designers. Knowing certain conventions, they will unconsciously adhere to them in much the same manner that a man speaks or writes without considering the rules which underlie every language. The architecture of 1924 will be looked upon as showing a great advance in the understanding of planning, but in other respects as marking a retrogression from the saner æsthetic expression of former periods. To use an expression in vogue in 1924, many of the leading exponents of architecture will be regarded as showing themselves to be "too precious" to secure lasting reputation. In 1974 architects and the public, which will understand them better than they do in 1924, will have quite lost the exaggerated respect for mere antiquity which is a marked feature of to-day. Historic buildings will be pulled down or altered as freely as they were in medieval times with the confident knowledge that they can be replaced by structures which will enrich and not diminish our architectural records. It will be recognised that in the middle period of last century much regrettable demolition took place to which the term vandalism was very properly applied. But in 1974 opinion will hold that æsthetic merit and not mere age will be necessary to ensure the preservation of any building. And when an old building in 1974 is required for some present purpose it will be considered reasonable to freely alter and adapt it.

The same standards of judgment will be applied in the decorative crafts. Old furniture and old pictures will be valued only on their merits, and the cult of the collector and antiquarian will be forgotten.

The object aimed at by consent in 1974 will be the utilisation of the advantage of combined effort, having due regard for individual rights. For instance, it will be recognised that great improvement schemes are hampered by existing divisions of private property. Every area to be improved will be polled, and if a large majority of votes are recorded in favour of the improvement, every property holder will receive shares, the interest on which will give him a liberal return on the capital value of his premises. The local authority will then be free to deal with the whole area without hindrance.

Later on we may deal with the nature of some of the improvements carried out under new conditions.

The West Dean Rural Council have again been considering the question of the water supply. The scheme is a large one embracing about twenty parishes. The Council have obtained grants from the Unemployment Grants Committee and Office of Woods. In consequence of this they have instructed their engineers, Messrs. W. H. Radford & Son, of Nottingham, to send the detailed plans to the Ministry of Health. The estimated cost is £45,000.

TYNEMOUTH.—The Board of Guardians have purchased a site near Military Road for the erection of a receiving home for children.

Continental Architect's Status.

PROTECTING AND PURIFYING THE PROFESSION: IMPORTANT LEGISLATION.

W. W. O'Mahony.

The status of the Continental architect is far from being in harmony with the services that contemporary civilisation requires from the profession and with the grave responsibilities that its exercise entails. The prestige enjoyed by him needs to be raised and protected by the same measures that have armed lawyers and doctors with an efficacious discipline. Such a reform alone can ensure the equilibrium of his rights and obligations.

French architects have long been agitating for a charter susceptible of putting an end to veritable anachronisms which open wide the door of the profession to every more or less instructed aspirant, able to prepare a plan, and apt, through ignorance, to disfigure entire districts.

Architecture to-day, in so far as it means the practical exercise of the building art, aims not only at beautifying, but at applying the acquisitions that science offer to the constructor of dwellings. The architect needs, therefore, to be in a real sense—and simultaneously—an artist, a hygienist, an economist and a man of wide general culture and instruction. It is not possible for him to realise this ideal in a manner satisfactory both to the public and himself if he lacks the legal means of regulating the recruiting of the professional ranks.

In France there exists a Government diploma which as a guarantee of competency has an unquestionable value. As an instrument of professional defence, however, it has no more efficiency than any ordinary certificate or testimonial. There is nothing to prevent any individual opening an office and presiding over it as a fully-fledged architect provided that he possesses the minimum elementary equipment or that he can earn enough to pay a staff of decent draughtsmen. The public, impressed by a title that no attainments authorise, seldom asks itself whether a new comer is really qualified and whether it is prudent to confide to him works the adequate realisation of which interest not merely a solitary client but the Collectivity.

ITALIAN AND BELGIAN BILLS.

The French architects hope to obtain an Act of Parliament abolishing these anomalies. Legal measures which promise to provide the needful protection are actually in preparation. They aim at establishing precise and comprehensive codes for both engineers and architects.

Belgium and Italy have taken the initiative in this respect. Parliamentary projects, dealing with the question of the Diploma and the conditions of the future exercise of the profession of architect, are at an advanced stage in both countries.

The authors of the Belgian Bill preface its provisions with an interesting, well-reasoned epitome (*exposé des motifs*) of the ideals which should inspire a legislator when creating a charter in conformity with the present relations between architecture and the arts and industries concerned in its constructions.

"ARTIST, ECONOMIST, HYGIENIST."

The architect's activities are governed and circumscribed problems of economy, hygiene and esthetics. It is considered necessary by the Belgians, that countries should have "an architectural policy based on rules dealing with the choice and the employment of materials and the best methods of construction." This being so the architect must necessarily be an economist.

He must always be keenly alive to the obligations of hygiene. It is not sufficient for him to satisfy the strict letter of the law; his knowledge and his intelligence must render the home *healthy*. In a word the architect must understand hygiene.

Individual building activity carried on without any consideration for the canons of art and the special esthetic needs of a town or a region can no longer be tolerated. A structure must suit its site and not alter any locality or prejudice the value of private property or the artistic patrimony of a province. To reconcile the requirements of clients with these canons calls for a taste and culture rarely within the range of an ordinary "builder." The architect must then have æsthetic skill.

The Belgian reformers desire to erect a legal barrier preventing the incapable and the uncultured from obtaining access to the profession and baptising themselves "architects" the moment they master the rudiments of drawing.

PROSECUTION AND PENALTIES.

The diploma—the principal documentary proof of the architect's acquirements—in order to invest him with the status sought, will be more than an ordinary or professional school certificate. It will have the same authority as a University

degree. To those who have obtained this diploma will be exclusively reserved the right to practise as architects or even simply to proclaim themselves as such.

Severe penalties are provided for by the Belgian bill itself, to punish those unlawfully posing or practising as architects. Fines of £3 to £12 are fixed for the first offence and for subsequent convictions terms of imprisonment varying from a week to three months.

To obtain the diploma, without which any self-styled architect will be prosecuted, a thorough examination is instituted which will have to be passed by all desiring to exercise architectural functions—with the exception of past pupils of schools already sanctioned by the State as centres of instruction in the building art.

Legislation on the same lines is passing through the Italian Parliament. The project does not differ essentially from that of the Belgian bill.

The agitation which the Continental architect has been patiently pursuing is thus on the point of attaining its ends. The status acquired as a sequel to these laws will have a most salutary influence not only on the personal situation and professional prestige of a hard-working and conscientious body of intellectual workers, but on the future of an art which demands for its effective exercise, emancipation from the more sordid preoccupations of the struggle for life. This *sine qua non* for the creation and conservation of a class of architects capable of satisfying the ever exigency of an increasingly complex civilisation, can only be ensured by a regime of professional protection rigorous in its regulation of recruiting while sufficiently respectful of vested interests.

LEWISHAM.—Plans passed: Two new streets from Burnt Ash Hill for Messrs. Smith Oakley & Gerrard; houses in Thornsbeach Road for Mr. T. Boughton; new street on Crofton estate for Messrs. H. Cheston & Sons.

ECCLESIASTICAL DECORATION.

"The Architect" Fifty Years Ago.

SEPTEMBER 26, 1874.

WHAT TO DO WITH TEMPLE BAR.

Sir Christopher Wren's famous City gate is condemned, and waits for sentence; and, unless we are very much mistaken, the discussion of the question what its sentence shall be will become a sufficiently interesting, not to say amusing, illustration of the ways of the times.

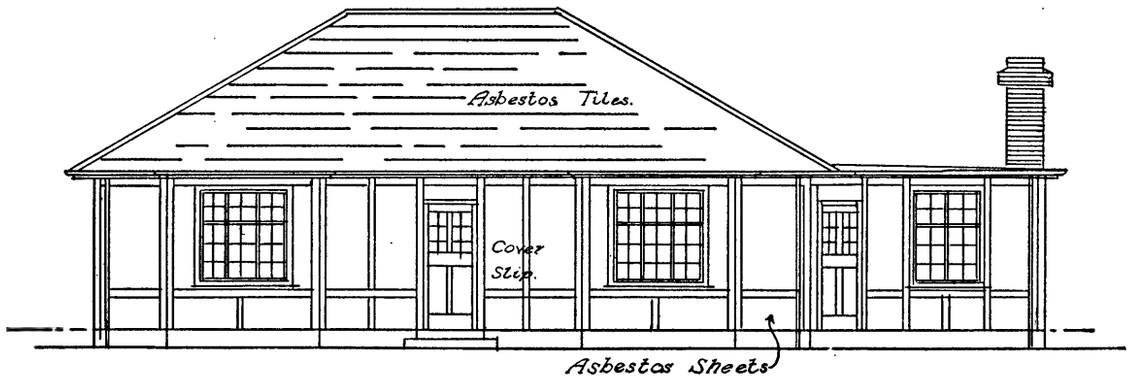
It is accident that sooner or later takes all of us for its prey. It is accident, or rather the concurrence of some half-dozen items of accident, that has at length brought the old Bar to grief. That it has been pronounced, for example, a nuisance by any number of people for the last thirty years or more is nothing. Nuisances last long; and if Temple Bar had fallen in with no other misfortune than its being considered an insufferable obstacle to the traffic of the most important thoroughfare in London, it might have held its own, and in a manner laughed at the whole world of complaining persons, for many a long year to come. That it has been proclaimed hideous by a great many people for a considerable time back is also no matter. Hideous objects, especially of the architectural kind, have a truly wonderful vitality in England. We may almost say that the uglier they are, the more determined do the public seem to be to tolerate their ugliness for ever; as if it were but good exercise for the Spartan virtue of the British character to submit to that kind of dissatisfaction—the stronger the disgust the greater being the merit. So it is not on account of any artistic shortcomings either that the venerable gateway has been at length condemned. . . .

Now this is a very pretty problem to be laid before a British public:—What shall be done with Temple Bar? And there are several answers which will naturally occur to the minds of those who have in any degree studied the habits of thought of the British public in such cases.

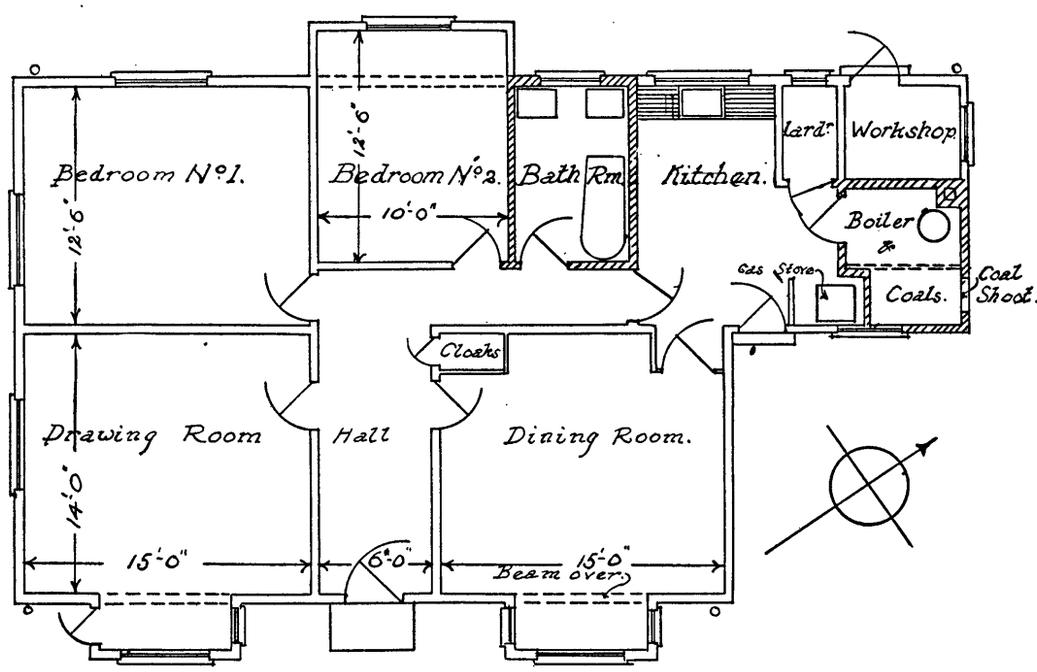
First, there will be not a few of us, and such indeed as are of the salt of the earth in their way, who will demand at once, without circumlocution, and without reservation, that the Bar shall remain. Let it be repaired; but beyond this let it not be touched by sacrilegious hands. Think of the great sovereigns of England who have humbled themselves at its closed gates, meekly requesting of the Lord Mayor permission to enter; and who, upon receiving from his lordship the keys by way of nicely calculated homage, have been obliged to hand them back to that independent dignitary, with a baronetcy to boot! Think also of the long roll of Lord Mayors and Sheriffs who have passed in noble procession through that archway; and of the traitors whose heads have withered on the summit! Think of the great architect of St. Paul's, who was the architect also of this humbler but not less authentic or characteristic design! Think of the very last remains of the municipal boundary here preserved, for the express purpose of preserving a palpable evidence of the municipal authority! Think, indeed, of any number of other considerations, and let the old Bar remain! We have taken leave to suppose that there are a good many person who may not unreasonably be expected to adopt such a line of argument as this. They would maintain the authenticity of the ancient structure at all hazards. As for the question of artistic taste, they will absolutely refuse to entertain it. The obstruction to the traffic they would correct by forming an open thoroughfare between it and the Law Courts; and if it were deemed necessary to have another on the opposite side of the way, they would probably not hesitate to sacrifice a dozen or twenty houses for the purpose of preserving the ancient Bar. Nor is it to be doubted that if the City Corporation were to incline in this direction for the perpetual assertion of the municipal dignity, the funds would be readily enough forthcoming for whatever improvement of the vicinity might be requisite.

Secondly, it will be proposed, as indeed it has been already, to devise some plan whereby to retain the old Bar in its form and substance, although not in its use; as, for example, by "working in" the old design as part of a new and more comprehensive one, so that the traffic of the street may be no longer impeded below while the work of Sir Christopher Wren shall still frown upon the passers by from above. Of this we can only say that if it be difficult to understand upon what grounds such an idea can be advocated, when art and archæology appear alike to discard it, the proposal is none the less on that account an eminently characteristic one.

A third notion, which will be widely entertained, is that the old Bar should be taken away and a new Bar of corresponding purpose put up in its place. It will be pleaded that the present edifice is not in any way the original one, and that a design by Mr. Street, or more probably by Mr. Horace Jones, would have as good a title to respect as that by Sir Christopher Wren; and it is not very easy to argue against this doctrine if it be the desire of the City authorities and the City public to preserve that senti-



FRONT ELEVATION.



PLAN.

PROPOSED BUNGALOW. G. STANLEY HARRISON, Architect.

ment which Temple Bar represents. The chief difficulty may be only an artistic one. It is no doubt within the resources of vaulting to span a roadway of the utmost width that could be proposed; but whether it may not be difficult to prevent the design from thus losing the aspect of a barrier in that of a bridge, or whether it may not be impossible altogether to retain the essential feature of a gate that can be closed, and yet to throw the street entirely open, are questions which would have to be gravely considered.

To remove the present edifice and rebuild it elsewhere is, fourthly, a proposal that might have been calculated upon to a certainty. In fact, this is already a subject of debate, as between the advocates of one site and another. Far be it from us to discourage the endeavour to preserve from absolute destruction an interesting relic at the cheap cost of removing it to other ground. But what would be the real and practical value of the thing when rebuilt, except it could be put up in the South Kensington Museum, it may not be easy to see. The principle, however, is at least as thoroughly characteristic of the days in which we live as any other that we have mentioned.

The Thurnscoe (Yorks) Urban District Council have placed the contract for their new sewage disposal works. The successful contractors are Messrs. the Provincial Construction Co., Ltd., of 39 West Sunniside, Sunderland, at approximately £25,000. The plans and specifications were prepared by Messrs. W. H. Radford & Son, Albion Chambers, King Street, Nottingham. An early commencement is to be made with the work.

The General Electric Co., of Kingsway, W.C.2, have secured the contract for six months' supply of Osram metal filament Vacuum and Gas-filled lamps and also for Robertson carbon filament lamps for the Southern Railway.

Proposed Bungalow.

By G. S. HARRISON, Architect.

The bungalow has been designed with the idea of keeping cost as low as possible. With this object in view, an asbestos on wood framing construction was adopted. The foundations are concrete, 2 ft. by 9 in. thick, with a 9 in. wall up to floor level, built on same, with a slate dampcourse, to receive the timber framing. Walls and partitions surrounding boiler chamber and bathroom are of brickwork.

The floor is to be 6 in. concrete, and for a distance of 2 ft. 6 in. inside external walls, to be mixed with 5 per cent. Pudlo, laid upon 6 in. hard core. The hall and bathroom to be finished with a composition flooring. The reception and bedroom floors to have linoleum laid to the concrete, while other floors are to be floated in cement.

The windows are of the standard steel cottage type set in wood frames.

The bungalow is intended to have central heating installed.

The roof is to be boarded on the common rafters and covered with asbestos pantiles.

The wall surfaces internally are to be covered with Lincrusta up to dado height and then with some well-known wallboard. External walls to be constructed of a strong wood framing, so arranged to receive the asbestos sheeting, of standard width, the joints of which are to be covered with a 3-inch by 1-inch cover fillet stained with Solignum to a dark brown.

The bungalow would cost about £480 to erect.

CHANGE OF ADDRESS.—Mr. Walter Dewes, architect and surveyor, has removed his offices from 4 Bloomsbury Place. W.C.1, to 37 Bedford Row, W.C.1. Telephone: Chancery 7512,

BARNT GREEN.—A new Church of England School is to be built with accommodation for about 160 children.

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General News.

BLYTH.—The Town Council have under consideration a proposal for the development of the beach at a cost of £10,000.

BRADFORD.—The Town Council have granted subsidies for the erection of the following houses: 10 houses, Beechwood Drive, for Messrs. Groves & Greenwood, Ltd.

BRIGHTON.—The Works Committee recommend the construction of a swimming pool at an estimated cost of £60,000.—The Water Committee have prepared schemes for extensions and for new reservoirs to cost £106,000.—A scheme for lighting and heating at the mental hospital estimated to cost £17,500 has been prepared.—The Housing Committee are seeking the sanction of the Ministry of Health to the erection of 210 houses on the Queen's Park site.—The Corporation have now obtained Parliamentary powers for the acquisition of properties for the establishment of a market on the Marshals Row site.—Plans passed: 23 houses, Mafeking Road, for Mr. G. Ayling; new premises, Western Road, for Westminster Bank, Ltd.; 10 houses and shops, Ditchling Road, for Mr. A. W. Parker; alterations, Star and Garter Hotel, for Messrs. Clayton & Black, architects; alterations Morton's Hotel, Queen's Road, for Messrs. Edlin Bros.

CHORLEY.—A new lay-out has been prepared for 60 houses on the Highfield estate.—It is suggested that plans should be prepared for an open-air school.

COULSDON.—The Urban District Council have asked the Recreation Ground Committee to consider the provision of an open-air swimming bath.—Plans passed: 12 houses, Chipstead Valley Road, for Mr. W. Cottage; 10 shops, Chipstead Valley Road, for Mr. Cottage.

DUNVANT.—The Glamorgan Education Committee propose the erection of a new elementary school.

HALESOWEN.—The District Education Committee are considering the erection of a new Council school for the districts of Hill and Cakemore.

HAMPTON (WORCESTERSHIRE).—The Education Committee are considering the purchase of a site at Great and Little Hampton for a new Council school.

HASTINGS.—The Westminster Bank, Ltd., has acquired Nos. 27 Havelock Road and 1, 2 and 3 Bank Buildings for demolition and rebuilding.

ISLINGTON.—A revised scheme has been prepared for the erection of 26 four-roomed flats and 8 three-roomed flats at Holly Park at a cost of £26,235.

KIDDERMINSTER.—Preliminary plans have been prepared for the provision of four additional temporary class rooms at the High School.

LANGLEY.—Police buildings are to be erected by the Worcester Standing Joint Committee on a site presented by Mr. Joseph Darby.

LUTON.—Mr. W. Oakley, builder, proposes to erect ten houses near the bowling green.—The Council have had revised plans for the covered market and proposed shops in Cheapside and Market Street and decided to invite tenders forthwith.

MALVERN.—Worcester County Education Committee have asked a sub-committee to report as to the need for a new secondary school.

OLDBURY.—Preliminary plans for new secondary school buildings were submitted to the Board of Education, which suggested certain alterations. Revised plans have now been prepared.

PERSHORE.—A special subjects centre is to be erected on the site of the infants' school at a cost of £500. The building is to be of reinforced asbestos sheeting with roughcasting outside.

SHOREDITCH.—The Borough Council have authorised the exterior repair of houses on the Stonebridge estate at a cost of £5,000.—In accordance with instructions the Town Clerk prepared a schedule of derelict properties suitable for renovation and use as working-class accommodation. The Housing Committee are unable to form a reliable estimate of the cost that will be involved, but are asking the Ministry of Health to make a general survey.—The Council have accepted the tender, £13,600, of Messrs. Chessum for the erection of 20 flats in Pritchards Road.

STOKE NEWINGTON.—The London County Council intimate their intention to erect a new elementary school for 640 children and capable of enlargement by 250 places.

STOURBRIDGE.—The Board of Education have urged for immediate action in regard to the proposed new secondary school buildings.

WARLEY.—The county architect of Worcestershire has prepared plans for a police station estimated to cost £3,500. The plans have been passed by the Standing Joint Committee.

WEST BROMWICH.—The joint committee of the West Bromwich and Walsall poor law unions have decided to erect buildings for the accommodation of 320 mentally defectives.

WEYMOUTH.—The Borough Surveyor has been asked to prepare plans for the construction of a jetty on the Weymouth side of the harbour.—Plans passed: alterations, Terminus Hotel, for Messrs. Crickmay & Son; alterations to Jersey Hotel for Messrs. Eldridge Pope & Co.; house, Alexandra Road, for Messrs. S. Jackson & Son.

WILLESDEN.—Plans passed by U.D.C.:—14 houses, Oxgate Gardens, for Mr. F. W. Brealey; workshop, Neasden Lane, for British Thomson-Houston Co., Ltd., Mr. S. Alban Scott, architect; 12 houses, Mount Pleasant Road, for Mr. C. W. Simmonds; 6 houses, Hanover Road, for Mr. H. Shaw; new factory premises for Royal Sovereign Pencil Co., Neasden Lane, for Mr. S. A. S. Yeo.

Trade Notes.

A Comparison of Costs in Fixing by the Old and the New Method.

In these days of high building costs both architects and builders must join forces in their endeavour to effect savings upon the numerous small items which enter into building to-day, as well as upon the more important sections of this vital industry.

With the idea of being specific we have in this article decided to deal with the question of fixing water waste preventors to plaster-covered brickwork, and to show how that clever yet simple little invention, the Rawlplug, will enable this job and, in fact, fixing jobs of every description, to be carried out quicker, much more securely and economically, and with only a fraction of the mess associated with the old-fashioned wood plugging method.

The fixing of water waste preventors has always been a source of worry to the plumber, as usually he has had to employ the services of a carpenter to make a back board, and a painter to make the board in question appear presentable after it has been fixed in position.

The labour and materials generally used upon a W.W.P. job carried out by the old-fashioned method consists of cutting and plugging four holes, supplying and fixing an 18 in. by 9 in. by 1 in. chamfered back board, priming and painting, and finally the fixing of the W.W.P. brackets, which embraces three trades—the carpenter, plumber, and painter.

At a modest estimate the cost of a job as described above would figure out at about 6s., but this price would vary according to the nature of materials plugged, as concrete would naturally take longer than materials of a breeze nature.

As a contrast, we will now deal with the execution of the same job by the new method—the Rawlplug method of fixing, which at once cuts out a fair percentage of the material used—namely, the chamfered back board, at the same time dispensing with the labours of the carpenter and painter.

The average W.W.P. job can be carried out neatly, and absolutely securely with the aid of six 2 in. No. 12 Rawlplugs, and six 2½ in. No. 12 screws. Furthermore, the combined cost of labour and materials would not exceed 1s. 6d., thus showing a saving of 75 per cent. on the estimated cost of 6s. for fixing the old-fashioned way.

Usually the brackets that support water waste preventors are fitted with three holes, and by actual tests under normal conditions it would take four minutes to jump corresponding holes in the material to which the brackets were to be fixed, using, of course, a standard Rawlplug tool-holder and jumping bit for the purpose. This means 12 minutes per bracket, or 24 minutes for the complete job; and if figured out upon a labour charge basis of 2s. 6d. per hour for plumber and mate, plus 3d. for the Rawlplugs, it is easy to see that the complete job would cost less than 1s. 6d.

A saving of this kind may appear to be trivial when dealt with individually, but when fixtures of the nature under review are made at public institutions, hotels, etc., then the labour and cost saving possibilities of the Rawlplug method of fixing becomes very real indeed, and it behoves the builder and architect to study carefully every possible fixing job in order to ascertain whether or not the new method should be employed.

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The Problem of the Times.

The great problem of the future which it seems to us must be solved if we are to emerge from what we may describe as a state of chaos is to obtain the advantages of collective action in every sphere of life without sacrificing the benefits of individual initiative. If we assume that the individual may be sacrificed in the interests of the community, if the wealth that he has amassed may be forfeited for the use of others, we at once deprive the whole community of the advantages of individual effort and enterprise, and the whole community is impoverished and not enriched in the process.

On the other hand, if the rights of property are everywhere and at all times absolutely maintained, it would follow in many instances that individuals could exercise a strangle hold on a whole community.

We have swung from the narrow individualism of the middle decades of the nineteenth century, which saw the birth of the factory age and of the squalid manufacturing towns of the North of England, to an equally unsound position in which no one can be certain that he will be allowed to retain what he has in a great many cases worked to produce, and which without his work might never have been produced by anyone else.

For it does not follow that because certain conditions have been produced that they were inevitable. Chicago is an instance of a great commercial centre which was the outcome of the deliberate plan of a few business men. It could have been built in another locality, it need not necessarily or inevitably have become the enormous railway centre which it is. If Mr. Ford had not built up his colossal business which has resulted in wealth which forms a problem in itself it is improbable that anyone else would have filled his place. As it is, many thousands are better off because one man has schemed out the most colossal business in the world and many can buy motor cars at prices within their means. The tendency here seems to be to discover by experiment how far the profits of enterprise can be taxed without effective protest.

But is such a course well advised in the interest of the community, the bulk of whom need employment in some form or other? An addition to a firm's income usually means the possibility of giving extra employment by enlarging its scope of usefulness. The capital of individuals is in a very large measure the capital of the nation they belong to. Would it not be wiser to say we will not tax your income in so far as it is derived from commercial undertakings in the country, but will secure the necessary money for the State by taxation based on your expenditure? The same allowances would be made that are now made in respect to the income tax, and though the yield from such a tax would be smaller, untaxed capital would provide more employment and so help to make up the deficiency. It would also encourage saving, the proceeds of which generally would be invested in some form or other in industry, and would thus increase employment. For it seems unwise to tax a very wealthy man on an income which he cannot in the nature of things spend on personal luxuries, and which is for that reason usually employed in the promotion of trade which benefits the wage earner. The State usually spends all it receives and therefore never has money to promote industry which has to be provided by the private employer.

What we suggest really amounts to freeing money which is expended in the interests of the community and taxing what is spent for personal objects, and this would seem to accord with the best financial policy for all. Most of us would freely admit that if the State could carry out commercial transactions more successfully than private individuals do there would be no rigid objection to State trading. But experience proves that the State does not, and very often involves the community in a loss which has to be made good by the public. If this is so our aim should be to confine the interference of the State within the smallest limits in the interests not only of the wealthy but of the poorest classes in the nation.

But on the other hand we believe there are many ways in which the interests of the community are sacrificed to the rights of the individual. The construction of our railways was accompanied by the payment of unreasonable and exorbitant compensation to private owners of property. Town improvements are frequently held up from the same cause, while building improvements are penalised by the exaction of higher rates. All these things and many others which might be mentioned seem to be opposed to the general good of the community.

Is it not time that we took a very much broader view of our problems, not from the standpoint of the Socialist or the individualist, but from that of the prosperity of the whole community? The Housing and Town Planning Act, which should be made compulsory instead of optional, is an instance of wise legislation in restriction of unchecked individualistic action, and its operation would benefit the whole community. We believe it possible to devise a new set of standards of expediency more consistent with justice than our present ones, and we should eliminate many of the factors which create class dissension and ill feeling.

Our Illustrations.

ST. NINIAN'S CHURCH, GRETNA. Evelyn Simmons, Architect.
NEW HOUSE AND STORE AT COOMASSIE, ASHANTI. R. J. Hugh Minty, A.R.I.B.A., Architect.
NEW BUNGALOW AT COOMASSIE, ASHANTI. R. J. Hugh Minty, A.R.I.B.A., Architect.
PROPOSED NEW BANK PREMISES AT COOMASSIE. R. J. Hugh Minty, A.R.I.B.A., Architect.

COLONIAL BANK, COOMASSIE, ASHANTI.

This building is to be erected on a prominent site in the centre of the town overlooking Kingsway, the principal street, and with a view as far as the "Ridge," the European segregation area.

It is to be built of concrete blocks and mass concrete reinforced with mild steel bars.

The floors will be of "odum," a native hardwood, and the joinery of native mahogany.

Verandahs and flats will be in ferro-concrete and the roofs covered with asbestos pantiles.

The designs illustrated have been prepared by Mr. R. J. Hugh Minty, A.R.I.B.A., of 35 Craven Street, W.C.2.

RESIDENCE AND STORE FOR CHIEF KOBINA MENSAH, AT COOMASSIE, ASHANTI.

This is at present under construction by the above firm and from the designs of Mr. R. J. Hugh Minty, and is similar in construction and finish to the above works.

BUNGALOW FOR THE GENERAL ENGINEERING AND CONSTRUCTION CO., LTD., AT COOMASSIE, ASHANTI.

This bungalow is under course of construction and is situated on the Bekwai Road in the European area.

It is to be built of concrete blockwork, rendered outside, stippled and whitened, and plastered inside with Portland cement, it being in a district infested with white ants.

The floors are of solid concrete laid with wood blocks of odum. The roof is to be battened and laid with asbestos tiles. All rooms are to be provided with ceiling vents, connected to roof ventilators. Ceilings are of $\frac{5}{8}$ inch matching and painted; walls distempered to selected tints, and floors waxed and polished. Joinery of "odum," stained, oiled and polished.

The door furniture is by Messrs. James Gibbons, of Wolverhampton, and is to be of cast bronze throughout.

The bungalow is being erected by Messrs. The General Engineering and Construction Co., Ltd., of Accra, Dunkwa and Coomassie, Gold Coast Colony, and the designs have been prepared by Mr. R. J. Hugh Minty, A.R.I.B.A.

Notes and Comments.

Dodges.

The Allocation Sub-Committee of the Liverpool Corporation appear to have a difficult task in selecting tenants from among the applicants for their new houses.

It appears that children are often adopted temporarily for the purpose of founding a claim and then sent to their parents when the tenant is in possession.

In other cases, aged relatives for whom housing was essential have been brought forward as a reason for favour, and afterwards despatched to their homes. Tenants frequently press to be allowed to sub-let, or sub-let without permission, and in these ways the Sub-Committee seem to have their work cut out for them. We can quite imagine that such practices are likely to promote a new occupation—that of securing a tenancy, and that subtle and ingenious persons might make a good thing out of such services.

This all illustrates the extreme difficulty concerned with the State and municipal management of what was in the past left in the hands of private owners. Meanwhile, the County Courts are crowded with those whom recent legislation allows to appeal to a Judge to secure the continuance of tenancies which the owners wish to terminate. We do not envy those who have to decide what is to be done with the property of others, but we are quite certain that the operation of recent Acts in respect to tenancies is even more detrimental to the interests of those tenants than it is to the owners, and is one of the chief reasons why housing is delayed or abandoned.

The Building Situation.

We do not suppose too much attention need be paid to the utterances of hot-heads who are sporadically urging that the recent settlement should be set aside. The question of the extension of working time in the summer months by two and a half hours a week seems to be like the red rag to a bull in the eyes of the building trades operatives. The extension of time is such a small matter that we cannot understand the heat aroused by it. But if the employers were canvassed, we believe they would agree that eight hours' work willingly given produced a better result than eight and a half hours' work unwillingly conceded, and it is quite possible that too much importance has been given by both sides to the question of hours. So while we believe the employers' contention to be reasonable, and the objection to it to be unreasonable, it is possible that it would be found wiser to eliminate the bone of contention—on terms. No doubt some believe the eight and a half hours to be the thin edge of a wedge, which may end by the reintroduction of excessive hours, but the fear seems to us to be quite unjustified. Few want to go back to methods and conditions which were clearly unreasonably oppressive and stringent, while employers know that such a change would be utterly impracticable to-day.

Bad Landlords—and Tenants.

Under the title "A New Weapon to Hit Bad Landlords," a contemporary alludes to the plan proposed by the Southwark Borough Council to put up the rates of rack-rented premises in order that landlords will lower rents rather than pay the increased amounts. The Southwark Guardians are said to have made an exhaustive enquiry into conditions existing in their borough and the evils arising out of the sub-letting of single rooms. We rather doubt whether the Borough Council are adopting the best means to deal with the evil they deplore, which is over-crowding, and whether it would not be wiser to limit the number of people to be accommodated in any one building. There are a good many people who prefer to save money on the rent of accommodation and to spend it in other directions, and these we may characterise as being bad, or at least undesirable, tenants. We believe that numbers of people are very badly housed in our northern towns whose wages would enable them to live in better conditions and it would be well for the community that they should be forced to do so. Quite a considerable quota of overcrowding is not due to poverty at all but to laziness and a want of a proper standard of decency. People prefer to spend their money in other directions and we need feel little sympathy with the intolerable conditions created by such an attitude.

Truro.—The City Surveyor has been instructed to prepare plans for utilising the lower portion of the Hendra site for parlour type houses.—Plans have been passed for proposed additions to the County Hall.—Messrs. Thornley & Rooke, Princess Square, Plymouth, architects for the Civic Hall, have been asked to get tenders for the scheme as soon as possible, the Ministry of Health having sanctioned a loan of £6,000 for the purpose.—The site of Nos. 2 and 3 Clement Street is to be cleared and the Surveyor asked to prepare plans for the erection of two houses.

Recent American Buildings.

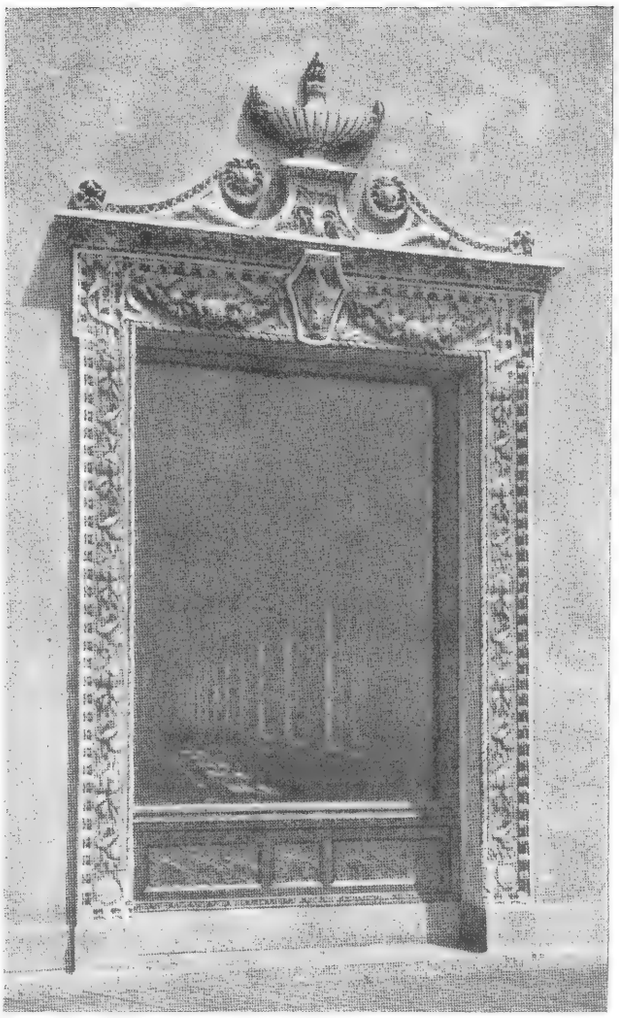
RESTAURANT BUILDING FOR THE CHILDS CO., CONEY ISLAND, N.Y. DENNISON & HIRONS, Architects.

Restaurant Building for the Childs Co., Coney Island, N.Y.

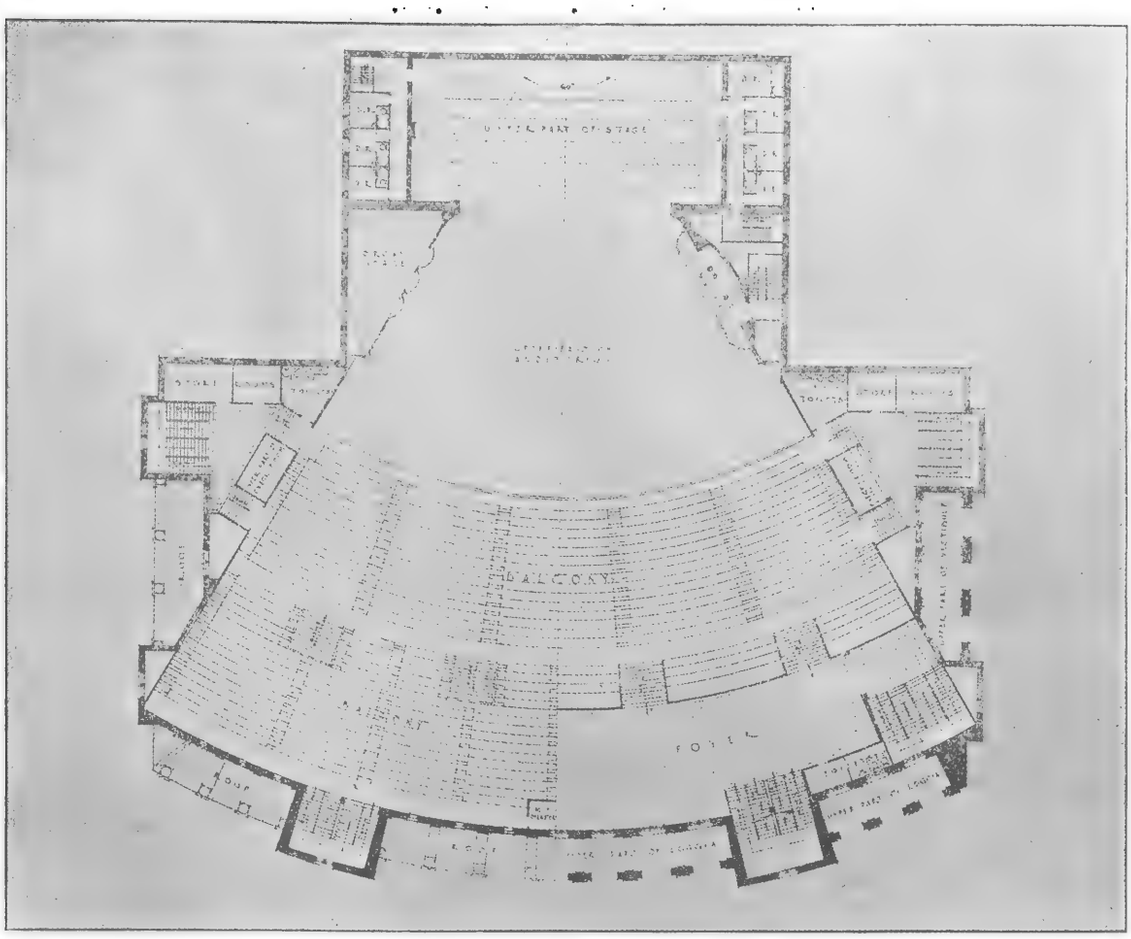
From the "American Architect," September, 1924.

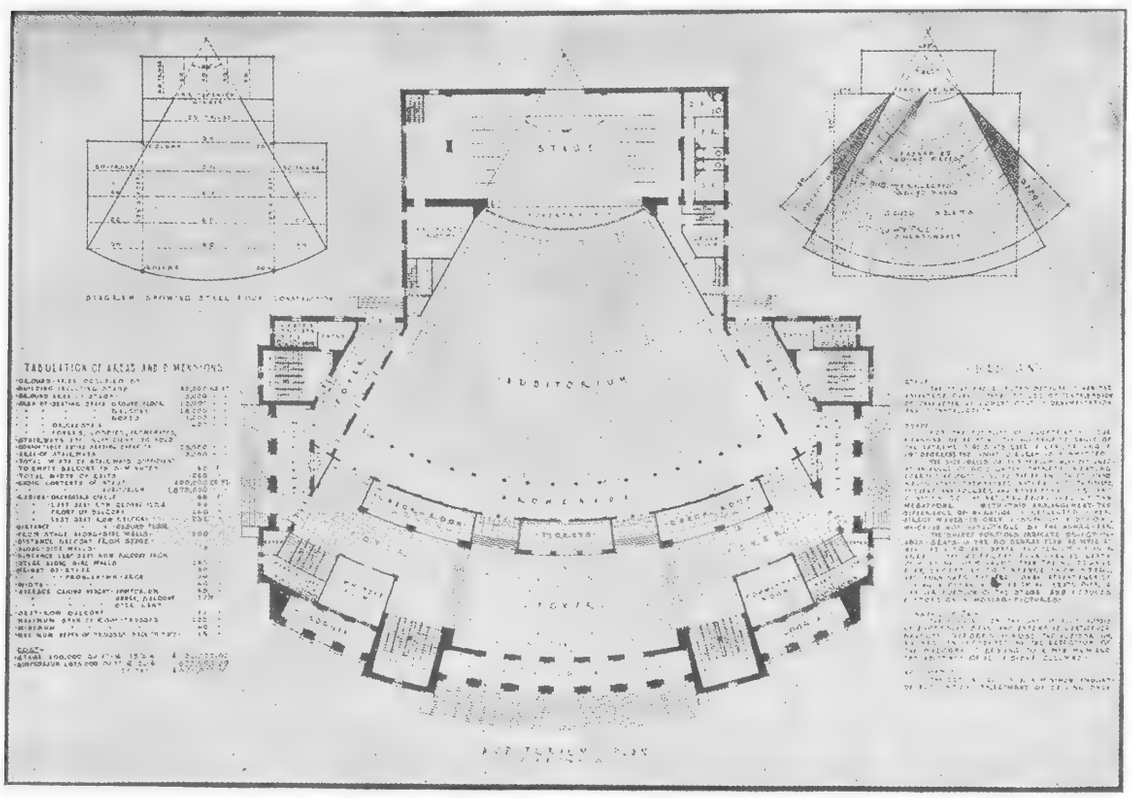
We give illustrations of a building which, while somewhat deficient in a quality of stately order and restraint which we have learnt to associate with American design, has an appearance of gaiety and pleasure which seems appropriate to its object. It has characteristics which show the leaning towards design based on the Spanish-Mexican tradition which has become increasingly popular in many parts of the United States. The architects were Messrs. Dennison & Hirons.

ARCADE DETAIL.

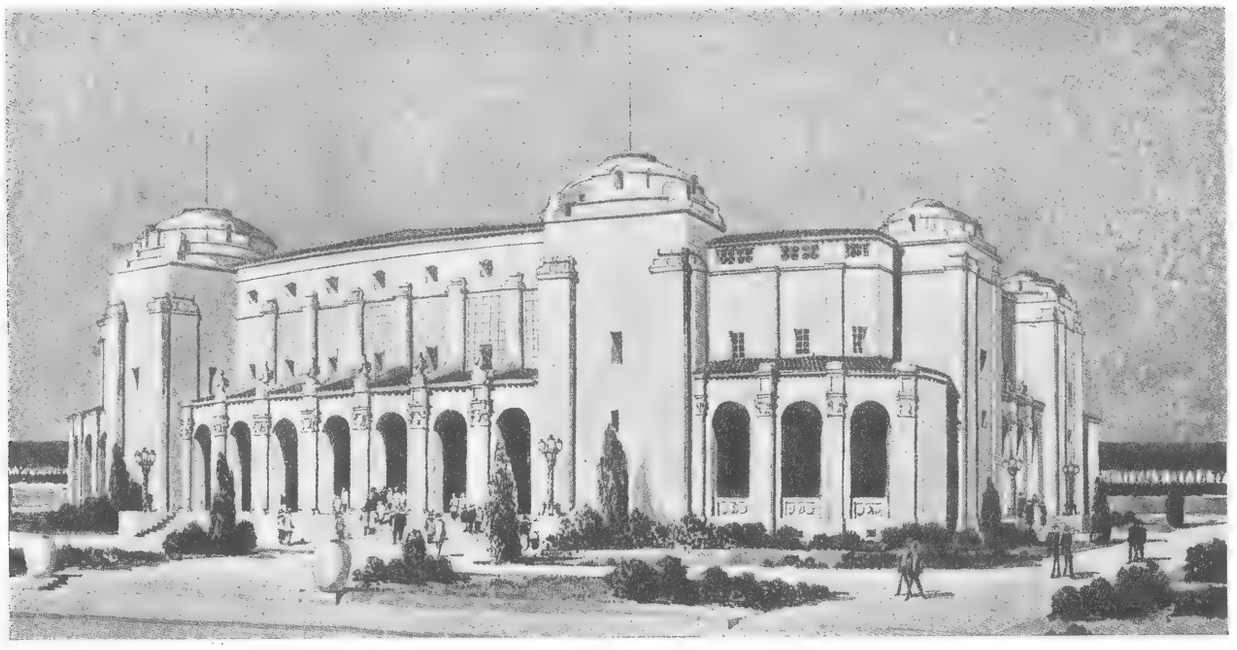


WINDOW DETAIL.





GROUND AND GALLERY PLANS: AUDITORIUM FOR THE CITY OF DALLAS, TEXAS.
MESSRS. LANG & WITCHELL, Architects.

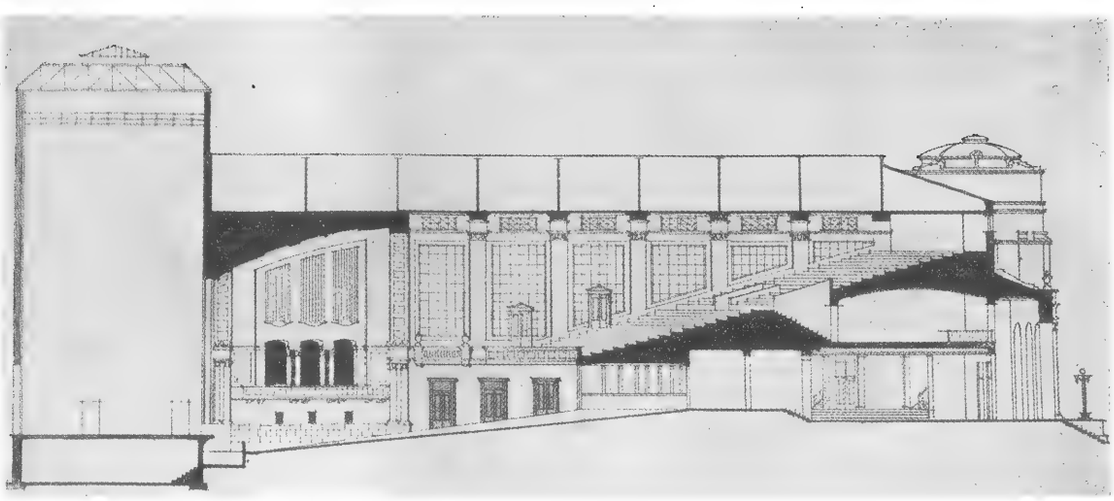


AUDITORIUM FOR THE CITY OF DALLAS, TEXAS: EXTERNAL VIEW. MESSRS. LANG & WITCHELL, Architects.

Selected Design for an Auditorium for the City of Dallas, Texas.

From the "American Architect."

The illustrations show the selected design for an auditorium in Dallas, Texas, which both in its plan and architectural treatment is an admirable example of architectural design. This is said to be the outcome of the first architectural competition held in the State of Texas under the full rulings of the American Institute of Architects.



The project was a Municipal Auditorium for Dallas, and the fact that the competition finally came to be an authorised procedure in spite of the early misgivings of the owners is due alone to the efforts of the North Texas Chapter. Furthermore, the success of this enterprise puts a more roseate tinge into the drab colours with which the picture of competitions in the "outlying districts" was painted at the Washington Convention.

A brief history of the case follows. In the spring of the year notices appeared in the Dallas press to the effect that the City of Dallas and the Texas State Fair Association would jointly build an auditorium to be located upon the permanent grounds of the Texas State Fair in Dallas. Shortly thereafter several Dallas architects were requested to present their ideas upon such a project to H. A. Olmstead, President of the Fair Association. This request created a bit of excitement in the profession locally, bearing some of the earmarks of a good old catch-as-catch-can competition. This was borne out by Mr. Olmstead's very logical statement of his position as an owner; that his job was the selection of the architect for the project, that he wanted ideas to help him in his selection, and if at this stage of the proceedings certain architects wanted to present sketches, while others did not, professional ethics being no concern of his, he would most certainly not refuse to look over such sketches. However, after an informal meeting of Dallas architects, it was agreed among themselves that the information requested would be presented in letter form and that no sketches would be prepared.

The winning design was selected largely by reason of its unique floor plan, being a distinct departure from the more or less rectangular auditorium plans of the other competitors. The 60° angle of the side walls does away with the objectionable corner seats and requires a minimum of acoustical correction. The objection of greater distance from the stage for some of the seats in this plan is overcome by the more desirable lines of vision obtained and better acoustical properties of the plan.

It is interesting to note, as indicative of the architectural trend in the South-West, that of the five designs submitted three were adaptations of the Spanish, the other competitors choosing to adapt their elevations more nearly to the design of the older buildings on the Fair site. The elevations are not equal in quality to the sections and plans.

Cheaper Building, No. 1: The Truscon Precast Concrete System.

VIEW SHOWING A HOUSE NEARLY COMPLETED.

The Trussed Concrete Steel Co., Ltd., of 22 Cranley Gardens, S.W., have, as is well known, carried out an immense number of reinforced concrete buildings of every kind, over 5,000 large reinforced concrete factories and other industrial buildings having been built by them, including factories for the B.S.A. and G.E.C. The urgency of the housing question has led them to consider how reinforced concrete can be most usefully employed in connection with housing, the Truscon system being the result.

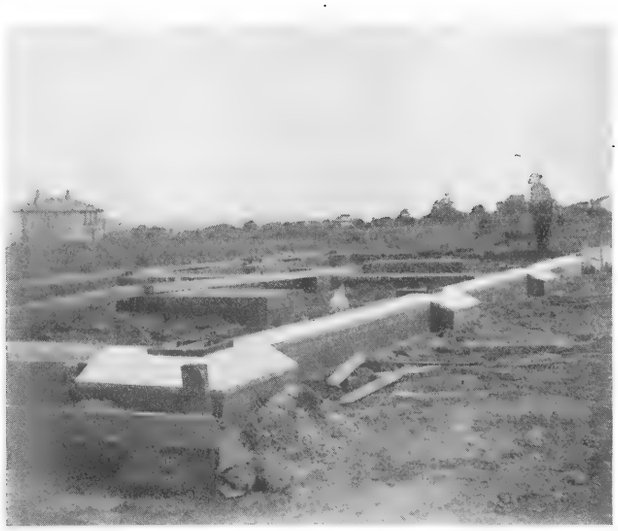
The foundations are formed of concrete thickened out under walls and further widened under columns, so that a hole 5 inches deep and about 12 inches square can be left in the foundation into which solid precast reinforced concrete columns are grouted. The grouting is done with waterproof cement, because the dampcourse which is placed in between the wall and the foundation is interrupted by those columns. A 4-inch concrete slab is provided between the wall foundation all over the site. In the foundations smaller holes are left for the grouting in of reinforced concrete intermediate columns.

All members are precast on the actual site of the house, thus overcoming transport charges, which are the enemy of precast work.

The walls of the house consist of outer and inner concrete slabs, 2 inches thick. The outer slab is of ballast concrete and the inner slab is made of ashes and cement and is hydroscopic, thereby avoiding condensation. These slabs only carry themselves for one storey high and do not carry any floor load. The floor loads are carried to the columns by means of precast reinforced concrete beams, which are supplied in couples and are referred to in future as " ties." These ties are 2½ inches thick and in some case 3 inches thick. The cavity between the slabs is 3½ inches, making the columns 7½ inches thick overall; the cavity between the ties is 1 inch less, keeping the ties and the slabs flush on the outer and inner faces.

All ties are resting on the columns on brackets and are bolted to a lug on the column. By this arrangement all live and dead weights of the building are directly carried from concrete to concrete. The bolts have no share in this work, they are only keeping the members in place, through tension in the bolt, but are not carrying any weight shear.

The great advantage of these ties and the manner in which they are connected with the columns is that they form a complete continuous steel tie round the building, hence the word " tie " used for these beams. It is on this account that these precast houses are so eminently suitable for localities where the ground is shifting, because the steel ties used to keep the old brick houses together form in this instance an original part of the system.



FOUNDATIONS.

FRAMEWORK IN POSITION.

A similar complete continuous steel tie is provided at the roof level. This has an enormous advantage and adds greatly to the strength of the house. Architects must, however, when considering the adoption of this system, realise that the eaves of the house must be level. The illustrations given make this clear.

Where windows and doors occur an intermediate hollow column is supplied on either side and is also supplied in other positions in order to reduce the length of the 2-inch walls. The provision of such intermediate columns near the doors and windows protect the walls from being shaken by the manipulation of same. The provision of these hollow columns also provides an easy fixing for the wood and steel fittings, as plates or isolated blocks can be driven in the hollow spaces to which the fittings are secured. A similar principle is followed at the roof. A timber plate is secured in a similar manner to the pair of ties at roof level, and provides a sound starting point for the timber roof construction.

The floors are the ordinary timber floors usually constructed out of 9 by 2½-inch joists at 18-inch centres. Every third joist has at either end a small angle cleat connected to it. This angle cleat projects into the 2½-inch cavity between the pairs of ties, and in this way every third joist becomes a tie between opposite walls. Where the floor spans are too great to be carried by above-mentioned joists internal columns and internal ties are provided similar to those used elsewhere.

Chimney stacks can be economically carried out in concrete like the rest of the fabric, no brickwork being needed anywhere.

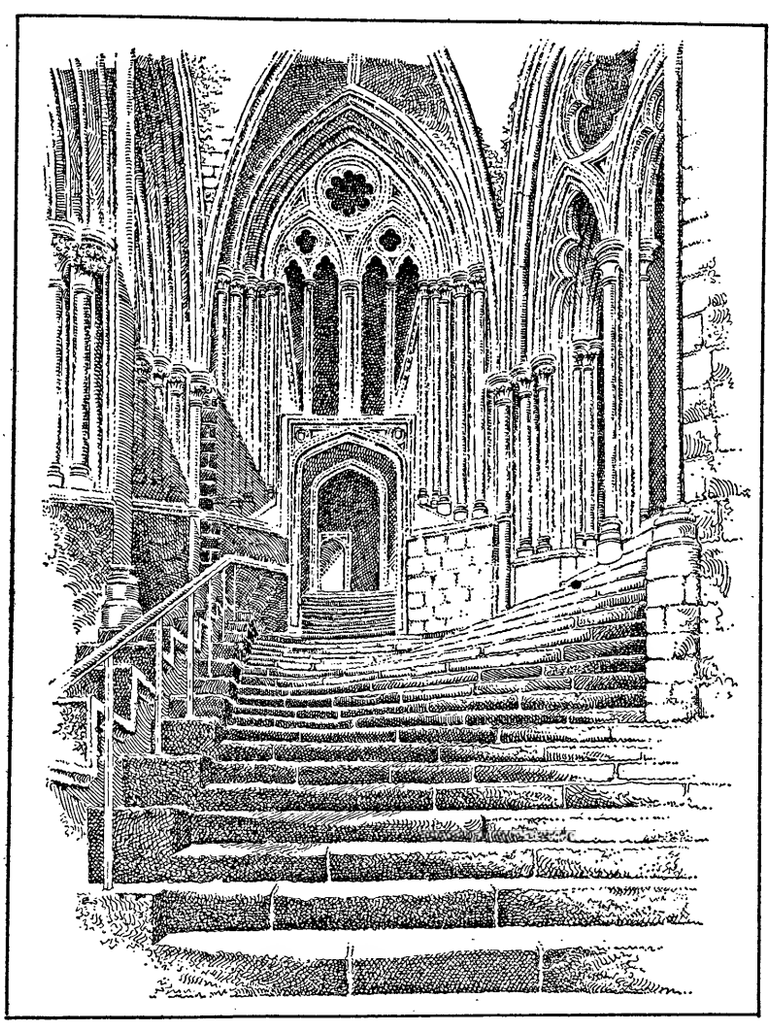
The party walls are constructed in the same manner as the outside walls with a cavity which adds greatly to the soundproofness of adjoining houses. The outside finish of the houses is mostly rough cast plaster, which considerably adds to the watertightness.

The slabs used in the double walls are merely placed in position, thus providing work for the unskilled, and thereby increasing the proportion of such labour that can be utilised in this system of house construction.

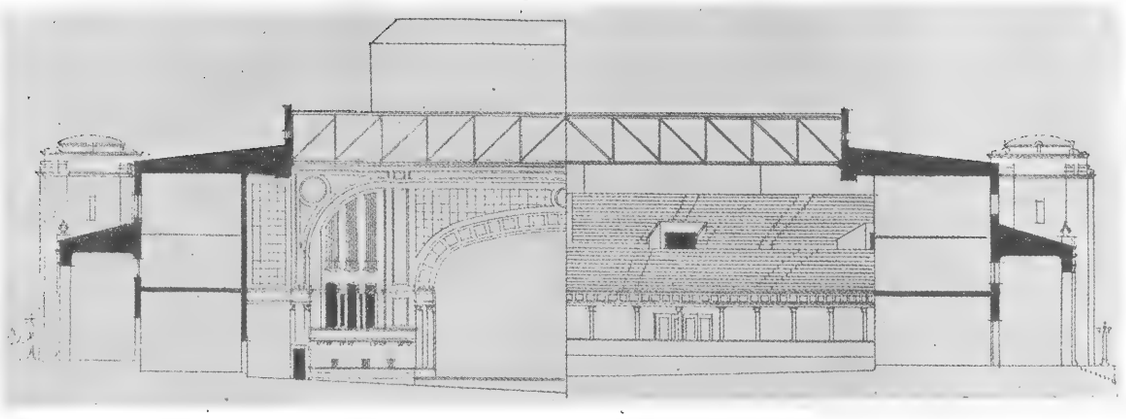
Truscon precast concrete housing contracts at present proceeding show that the work can be carried out at prices which are at least as cheap as ordinary brick construction, while it is much quicker. Houses can be completed in eight weeks, as compared with four to six or seven months allowed for building a brick house. In addition, 60 per cent. of the labour required is unskilled.

For the information of those thinking of employing this system we may add that the Trussed Concrete Steel Co., on being supplied with an architect's design, prepare drawings of the reinforced concrete framework, which are supplied together with bills of quantities for this part of the work to approved contractors, preferably those having knowledge of the system, and contractors then submit tenders.

The house when completed can be roughcast, cemented or finished in any way desired by the architect, whose design is not in any way handicapped by the use of the system.



THE STAIRCASE TO CHAPTER HOUSE, WELLS CATHEDRAL. Drawn by W. Eaton, A.R.I.B.A.



AUDITORIUM, DALLAS, TEXAS (see. p. 203).

The London Art Galleries.

An Exhibition of Canadian Pictures at 63 Baker St., W.

Messrs. G. N. Norwell, O.S.A., and Harold Beament held their first exhibition in this country at the Gallery of Messrs. Elliott & Fry, the famous photographers, in Baker Street. The Gallery, which is very well lighted, can be recommended to all who desire to hold exhibitions. Mr. Beament is an artist of the modern trend of thought; though his pictures are very sane, there is an element which would attach him to the modern group of painters. Three charming views are worthy of special note: "Winter Moonlight," with "Sunlight and Shadow" as its immediate neighbour, brings home to the visitor the fact that the artist possesses a high appreciation for colour and also is able to convey his ideas in a direct and simple manner. In none of the exhibits is there any evidence that the subjects have presented any great difficulties; the effects are never laboured and appear to represent just illustrations of Nature as seen by the artist and rendered in his own individual style. The third picture that appealed to our notice bore the title "The Bridge" and convinced us that Mr. Beament also understood the value of presenting views in a decorative style. The work of Mr. G. N. Norwell, O.S.A., illustrates a much wider field: he also possesses perhaps a more varied technique; at least, judging from his pictures one is inclined to credit him with a wider technical knowledge. "The Ottawa River" is a picture treated in an original manner. In the foreground on the immediate bank of the river some trees are very delicately indicated, giving the correct impression of distance to the opposite bank. The sky is perhaps a little worried, though as a whole the picture is good. "The Ottawa River, Autumn," shows us the artist influenced by the brilliant colouring of the scene he has depicted; the intensely blue river contrasts richly with the autumn browns of the trees in the foreground. "The Valley of the Ottawa" is a winter scene painted in water colours: a careful painting and undoubtedly truthful. Another picture, entitled "Moonlight," is not nearly so successful as a similar subject treated by his partner in the exhibition, Mr. Beament. Mr. Norwell does not give us in his rendering of "Moonlight" any tone variations; in fact the whole is rather dull and flat and appears to bear marked evidence of being a memory picture. "The Lumber Mill, Ottawa," conveys a vivid impression of the scene which, though strange and unknown to ourselves, bears to the stamp of truth and sincerity.

The Woman Artists' Exhibition, Maddox Gallery, Maddox Street.

On entering the gallery from the street a certain unmistakable familiarity was our first impression. The address was the Maddox Galleries, Maddox Street, W., but in truth the gallery is known to the writer as the R.I.B.A. Gallery with the main entrance in No. 9, Conduit Street, W.

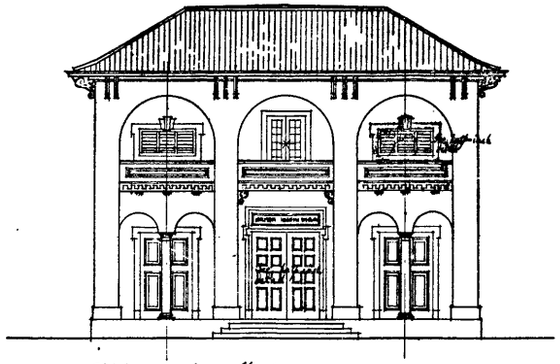
To return to the exhibition, the main hall or gallery is devoted to lady artists who render their pictures in oils. Some interesting sculpture is also exhibited in the gallery. No. 26, "The Peace Conference," by D. E. Lucas, is a quaint piece of work depicting the principal actors in a very original form and setting. No. 22, "Geraniums," by Edith M. Fry, is poor in the rendering of technical values and she appears to have little appreciation of the pictorial values of the subjects chosen. The whole is flat and uninteresting. Colour, be it ever so brilliant, will not of itself produce a pleasing effect. No. 38, by the same artist, would be a good picture but for the fact that the big tree in the centre might be taken for a vegetable marrow, placed in an erect position. No. 30, "The Wise and Foolish Virgins," by Marion Dawson, we should describe as an unfinished effort; the artist, having selected a mode of treatment and style of painting, should, in our opinion, have carried the painting into its final stages. The central figure ought at the very least to have been carried much further. The whole has the appearance of being just in a stage beyond the general mapping-in of the composition. Under no circumstances could we imagine that the artist wished to convey the idea that she was exhibiting an impressionistic rendering of the subject. The style is of the old school which has just passed. The arms of the sitting figure, which are thrown into prominence by the light material and colouring of the garment of the central figure, are devoid of any modelling; their contours do not suggest life. The central figure is poorly drawn, the arm being, in our opinion, on the small side, and the general proportions might benefit by some corrections.

In the farther gallery paintings in water colours are exhibited. Numbers 105 and 115, by Clyde Christie and B. Tolkien, whilst not water colours but rather painted gesso panels, are decorative and effective. Both are in the ornamental character and make a very strong appeal to our sense of their decorative usefulness. No. 136, "St. Mark's, Venice," by M. Bruce Low, is lightly rendered; the magnificent building with its glory of detail is ably suggested. No. 137, "Autumn," by Alethea Garstin, in strong contrast to 136 immediately above, is shown to considerable advantage by virtue of the hanging committee's arrangement, though in itself it is a clever piece of work; the strongly rendered tree in the centre of the picture, in contrast to the refined and delicate colouring of the walls of the houses, makes a very well-thought-out composition. No. 150, "St. Mark's, Venice," by M. E. Haward. The view selected is almost identical to that taken by M. Bruce Low in her picture just round the corner of the gallery, numbered 136. Whilst it is perhaps a little unfair to compare the two pictures, we feel that No. 150 would have been better hung right at the other end of the gallery. No. 136 is so delightfully fresh and untroubled that with the best of intentions one cannot help comparing the two, and not to the advantage of 150. Possibly some might find 136 a trifle hard, but we miss the

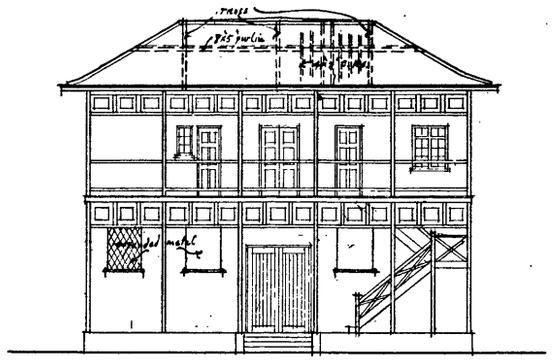
NEW HOUSE AND STORE for CHIEF KOBINA MENSAH at COOMASSIE ASHANTI

SCALE EIGHT FEET TO ONE INCH

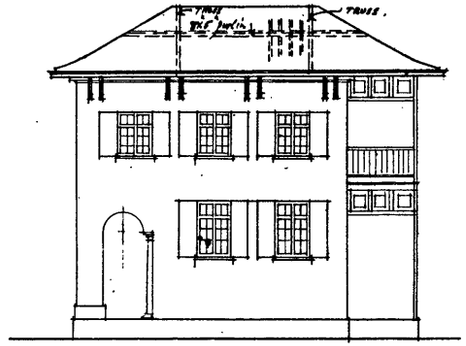
DRAWING No. 1



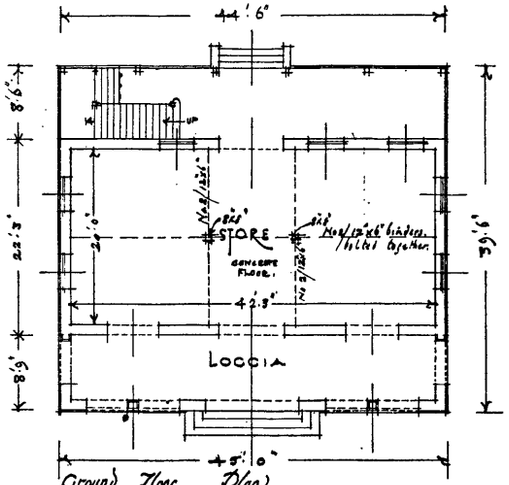
Elevation to Roadway



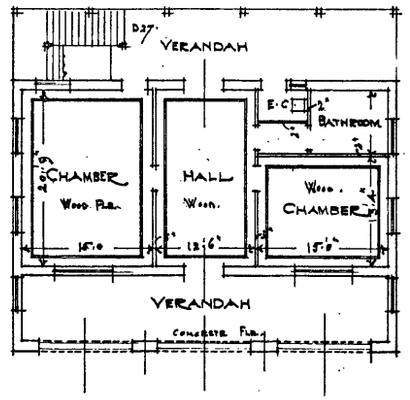
Back Elevation



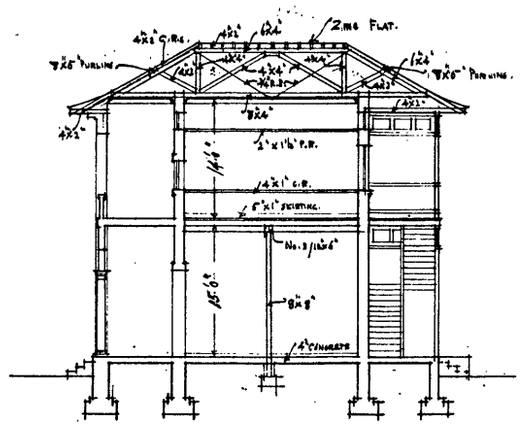
End Elevation



Ground Floor Plan



First Floor Plan



Cross Section

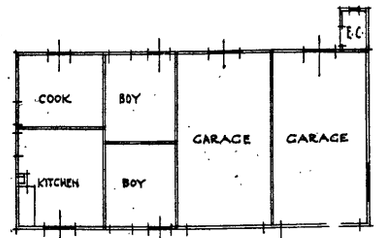
R. J. HUGH MINTY A.R.I.B.A. ARCHITECT
THE GENERAL ENGINEERING & CONSTRUCTION CO. LTD.
COOMASSIE, ASHANTI, WEST AFRICA, CONTRACTORS
APRIL 1924

"PHOTO-LITHO" WM BROWN & CO. LTD. LONDON, E.C.3.

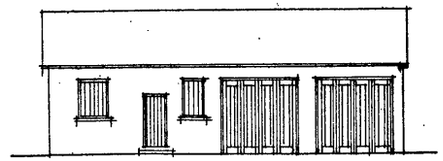
NEW HOUSE AND STORE AT COOMASSIE.

R. J. HUGH MINTY, A.R.I.B.A.

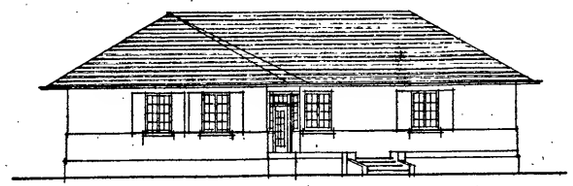
NEW BUNGALOW at COOMASSIE ASHANTI BRITISH WEST AFRICA for MESSRS. THE GENERAL ENGINEERING AND CONSTRUCTION COMPANY LTD.



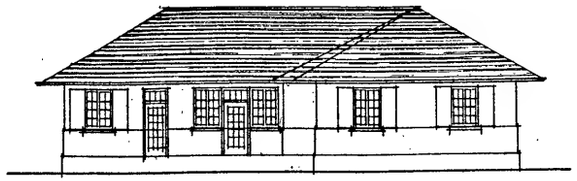
GROUND PLAN BOYS QUARTERS



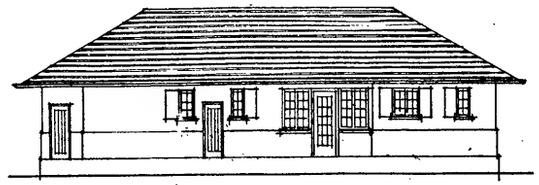
ELEVATION BOYS QUARTERS



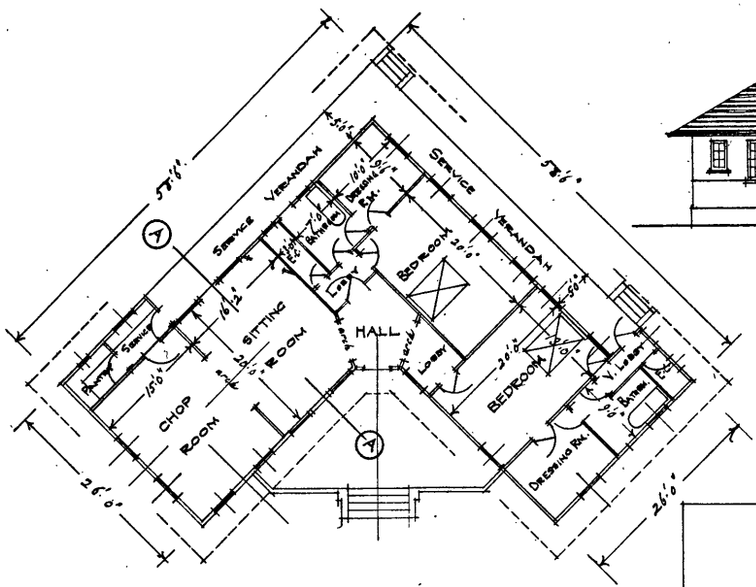
EAST ELEVATION



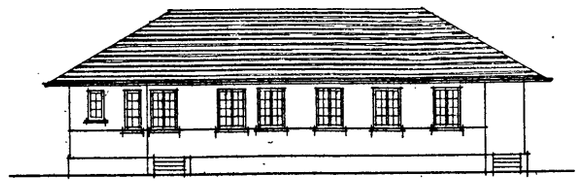
NORTH ELEVATION



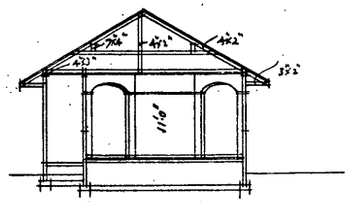
SOUTH ELEVATION



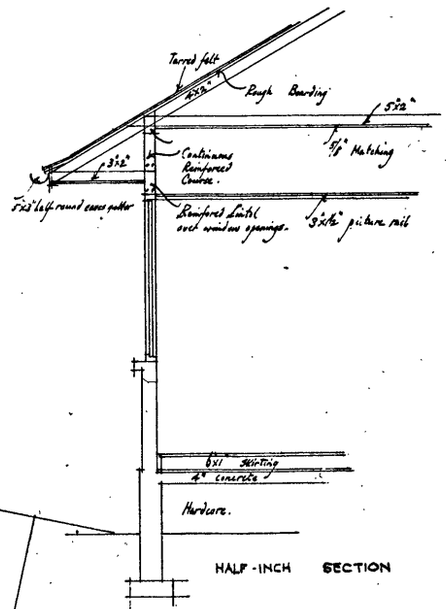
GROUND PLAN



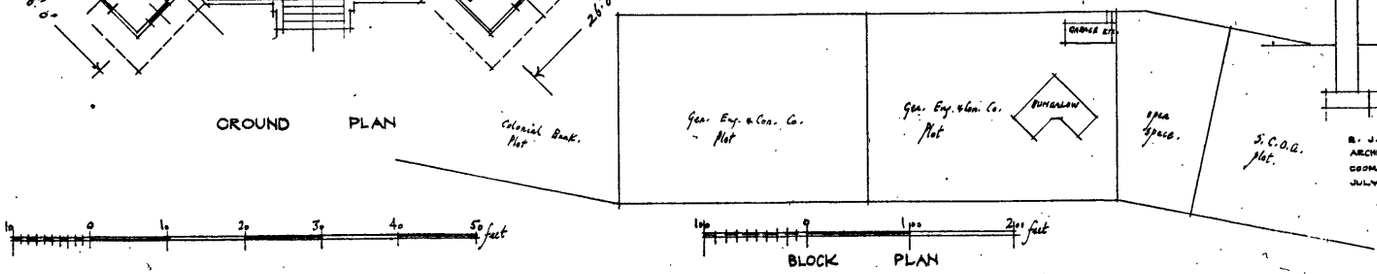
WEST ELEVATION



SECTION A-A



HALF-INCH SECTION



B. J. HUGH MINTY A.R.I.B.A.
ARCHITECT.
COOMASSIE, ASHANTI.
JULY 1924.

10 0 10 20 30 40 50 feet

100 0 100 200 feet

BLOCK PLAN

"PHOTO-LITHO" Wm BROWN & CO. LTD. LONDON, E.C.3

NEW BUNGALOW AT COOMASSIE.

C.H M[illegible] R.I.B.A.

COLUMBIA
UNIVERSITY
AVERY
LIBRARY

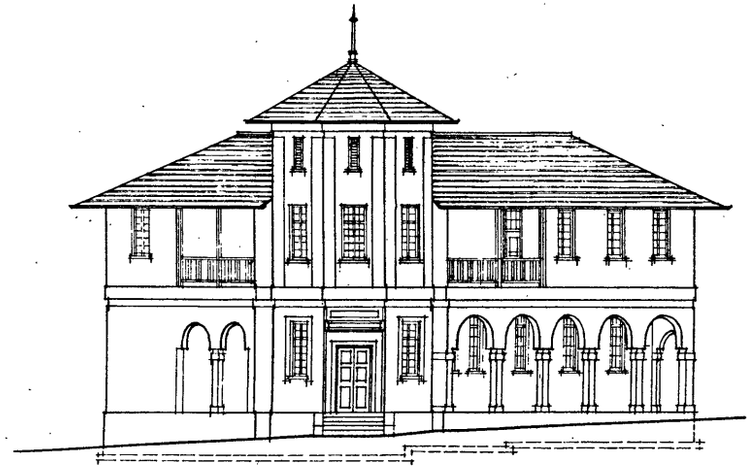
TOBER 3rd. 1924.

COLUMBIA UNIVERSITY AVERY LIBRARY

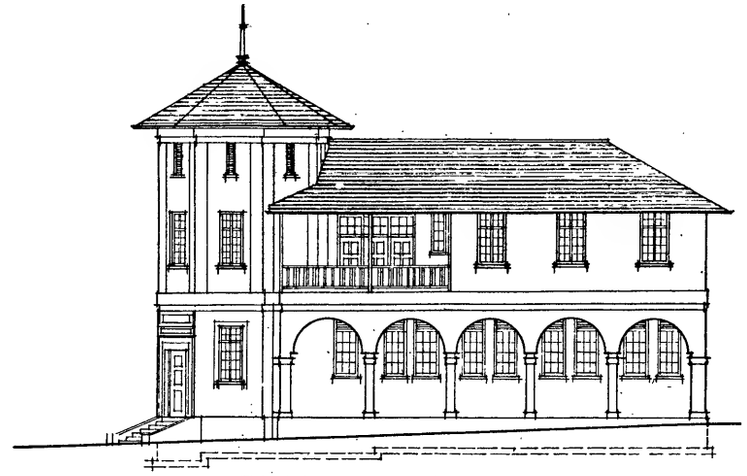
PROPOSED NEW BANK PREMISES for MESSRS. THE COLONIAL BANK LIMITED AT COOMASSIE · ASHANTI · B. WEST AFRICA

SCALE EIGHT FEET TO ONE INCH

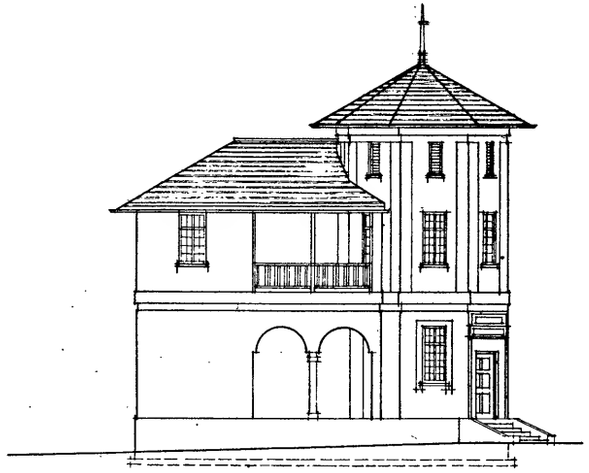
DRAWING No. 2



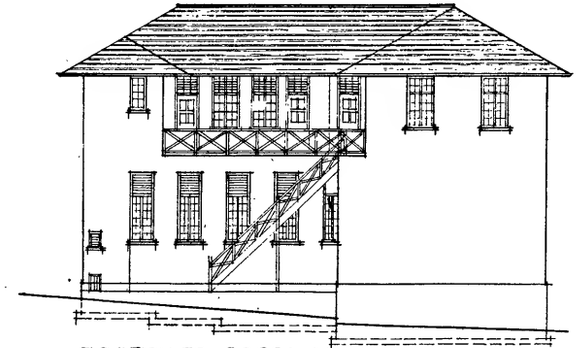
FRONT ELEVATION



ELEVATION TO BANK ROAD



ELEVATION TO KINGSWAY



ELEVATION TO COCOA YARD

R. J. HUGH MINTY A.R.I.B.A.
ARCHITECT,
COOMASSIE. JUNE 1924

THE GENERAL ENGINEERING & CONSTR. CO. LTD.
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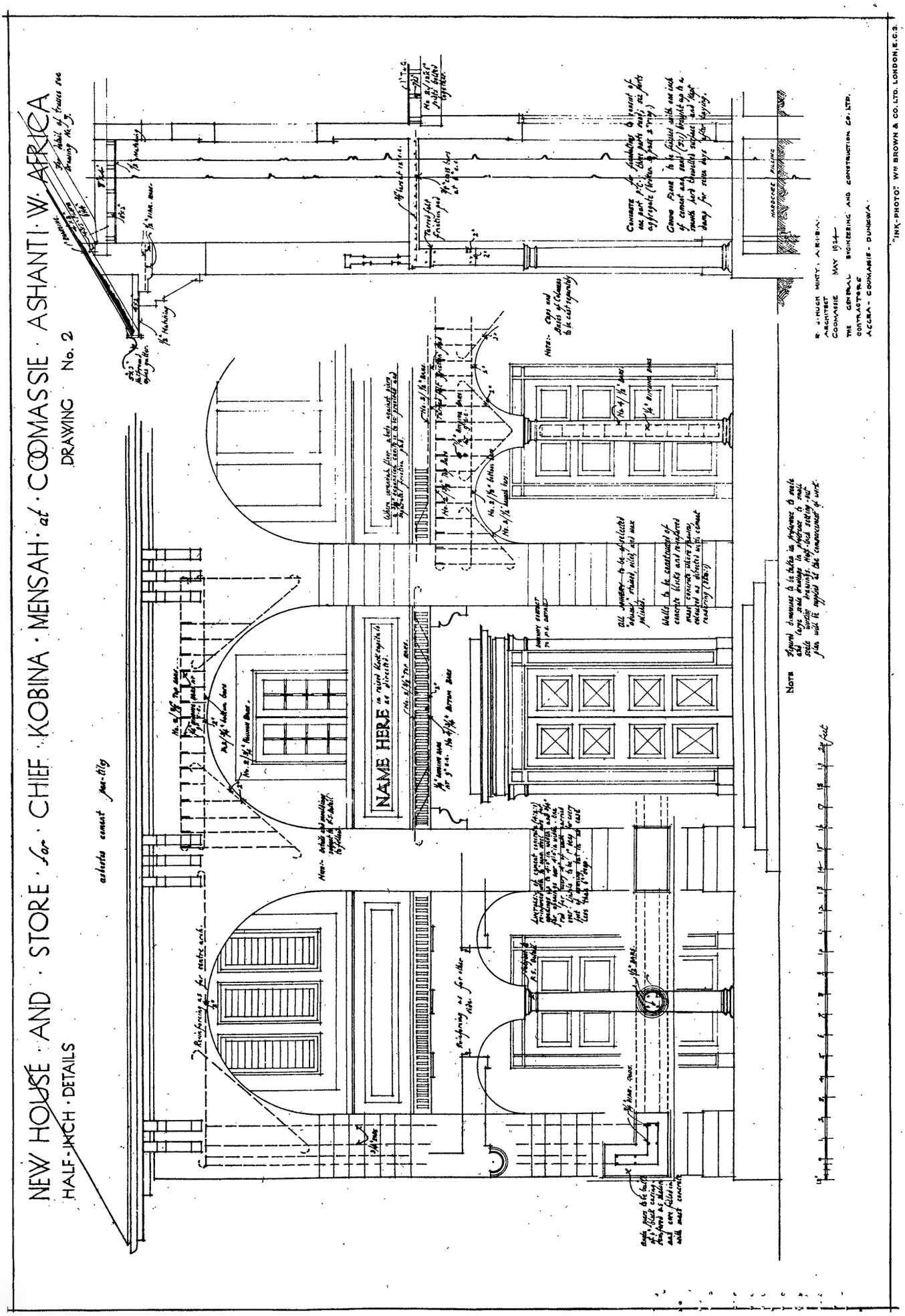
"PHOTO-LITHO" Wm BROWN & CO. LTD. LONDON, E.C.3.

PROPOSED NEW BANK PREMISES AT COOMASSIE.

R. J. HUGH MINTY, A.R.I.B.A.


NEW HOUSE AND STORE for CHIEF KOBINA MENSAH at COOMASSIE ASHANTI W. AFRICA
DRAWING No. 2
HALF-INCH DETAILS
NAME HERE
R. J. HUGH MINTY, A.R.I.B.A.
ARCHITECT
COOMASSIE MAY 1924
THE GENERAL ENGINEERING AND CONSTRUCTION CO. LTD.
CONTRACTORS
ACCRA - COOMASSIE - DUNKWA
"INK-PHOTO" WM BROWN & CO. LTD. LONDON, E.C.3.

NEW HOUSE AND STORE AT COOMASSIE.

R. J. HUGH MINTY, A.R.I.B.A.

careful and correct drawing in No. 150. The general hanging arrangements in this gallery are well thought out, but we feel that 136 and 150 might have been separated by a greater distance. Also 145 has hardly been treated fairly. 154 immediately above 155 is not a happy arrangement, and either of these two pictures could have given place to 145 and have been improved by the change; now, as they are, they just kill each other, and illustrate their mediocre merit.

No. 156, "Restaurant," Elfrida Tharle-Hughes. We hope never to have the misfortune to be invited to dine in such a place. As a guest we should be obliged to endure. But were the matter left in our hands we should seek the nearest exit. When we examine the picture closely we see that the brilliant yellow walls have reflected their colour on to the table linen, the waitresses have also come under the orange yellow influence—in fact nothing has escaped the all prevailing yellow. A mutton chop would be utterly impossible in such a "Restaurant." Curious, all the visitors are dressed alike in deep purple red clothes. The drawing is clever, it being never an easy matter to depict tables in correct perspective in a composition of this character. No. 162, "The Cornish Wrestling Match," by the same artist, is a very clever painting treated in a simple manner, but full of effective contrasting colours. The actual subject of the picture is full of interest.

No. 221, "Market Place, Caushbee," by C. K. C. From an architectural point of view the picture illustrates a lack of respect on the part of the artist towards the glorious art of architecture. She has used as a background some building of decided interest for the purpose of illustrating a few indifferently rendered market stalls. Architecture has definite characteristic details which cannot form part of a successful picture unless rendered in a manner which will convey a sense of knowledge.

No. 228, "St. Bartholomew the Great," by H. M. Bulkley. This wonderful interior is hardly the proper subject for an impression such as has been painted by the artist. The whole beauty of the building depends on a correct rendering of its detail and character that will convey to the public the church's historic age and architectural period, but the artist has failed entirely to grasp the fact that the interior illustrates perhaps one of the best examples of Norman architecture in the country. Her picture might be any two arches in some church. We know the subject very well and the great difficulties it must present to any painter. No. 258, by Alys Leigh Bentham. The technique in this pen drawing displays a general lack of knowledge of the great opportunities that the medium presents to the artist. Why select a light which gives the artist so little opportunity of rendering the subject in an effective and interesting manner? As it is, the effort is laboured.

The Grosvenor Gallery, Bond Street.

An exhibition is now being held of drawings and water colours by Muirhead Bone, Sir D. Y. Cameron, R.A., Charles E. Cundall, Hester Frood, James McBey, Algernon Newton and Job Nixon. No. 1, "Wiltshire Downs," by Hester Frood, whilst being quite a pleasing piece of work, is in truth a very unsatisfactory representation of the Wiltshire Downs. These hills are indicated in the distance without any detail beyond a very ordinary skyline which might illustrate any distant hills. In the foreground two men are working in a field, the sky occupying four-fifths of the whole. The small picture is surrounded by a mount out of all proportion to the sketch; though this defect can be easily rectified, it would have been more satisfactory to see the work in frames and mounts which might under reasonable circumstances be their permanent setting. No. 2, by the same artist, "Montreuil," is full of character. The avenue of trees to the left is delightful in its suggestiveness. The distant town is just sufficiently indicated to arouse interest. The whole makes a charming picture. No. 4, also by Hester Frood, titled "Bideford Bridge," shares our praise with No. 2. The technique is wonderful. Everything has been treated in light tones and yet distance and mid-distances are effectively illustrated. No. 6, by Sir D. Y. Cameron, R.A., bearing the title "Cliffs," is a good piece of work, but nothing to make a great fuss over. No. 7, "Loch Ericht," is pleasing, and conveys a fine sense of atmosphere, but again we are not moved to indulge in any rapturous expressions of delight and wonderment. No. 8, "Ely Cathedral," by Sir D. Y. Cameron, R.A., also the author of Nos. 7, 9, 10 and 11, does not satisfy our architectural idea of how such a beautiful piece of detail should be rendered. We should classify all of Sir D. Y. Cameron's exhibits as being the artist's sketches, not sketches by the artist. No. 9, "The Ewe Island, Loch Lomond," is undeniably good, but, except to those who know the district and are able to recall the individual character of the scene, the picture could hardly be expected to arouse outside and general interest. No. 12, "Mending Nets," is by Hester Frood, and is good, though the mount and frame are out of all reasonable relation to the size of the sketch. No. 13, by the same artist, is illustrative of its title, "A Wiltshire Farmyard." No. 22 is one of three exhibits by Job Nixon. The position selected seems to us rather unfortunate. There are indicated two very attractive buildings, which each might have formed the centre or point of interest in an interesting composition. No. 29 brings us to the work of Mr. Muirhead Bone, who is exhibiting twenty-six sketches which illustrate many styles and methods of treatment. "Stromboli," No. 30, is a very clever impression of the burning mountain surrounded by the sea. No. 33 is titled "Constantinople." We have never had an opportunity of visiting this eastern city, so we cannot judge Mr. Bone's impressionistic sketch, though we have seen many views of the Thames which greatly resembled Mr. Bone's picture of Constantinople. Nos. 34, 35, 36 and 37 are undoubtedly not intended as sketches in the ordinary sense. They give us the very strong impression of being sketches of subjects the artist intends to use in a different setting at some later period. No. 38, "Tourists at Corinth," is a truly fine piece of work, and possibly a very truthful representation of an ever recurring scene. No. 42, "View from Toledo," is perhaps the best picture in Mr. Bone's collection. The imagination is quickened and inspired by the view given in the picture. No. 46, "The Göte Canal, Sweden," finds the artist in a different mood, giving expression to details in a very characteristic manner.

WORCESTER.—The City Council have under consideration the provision of a new secondary school for girls.

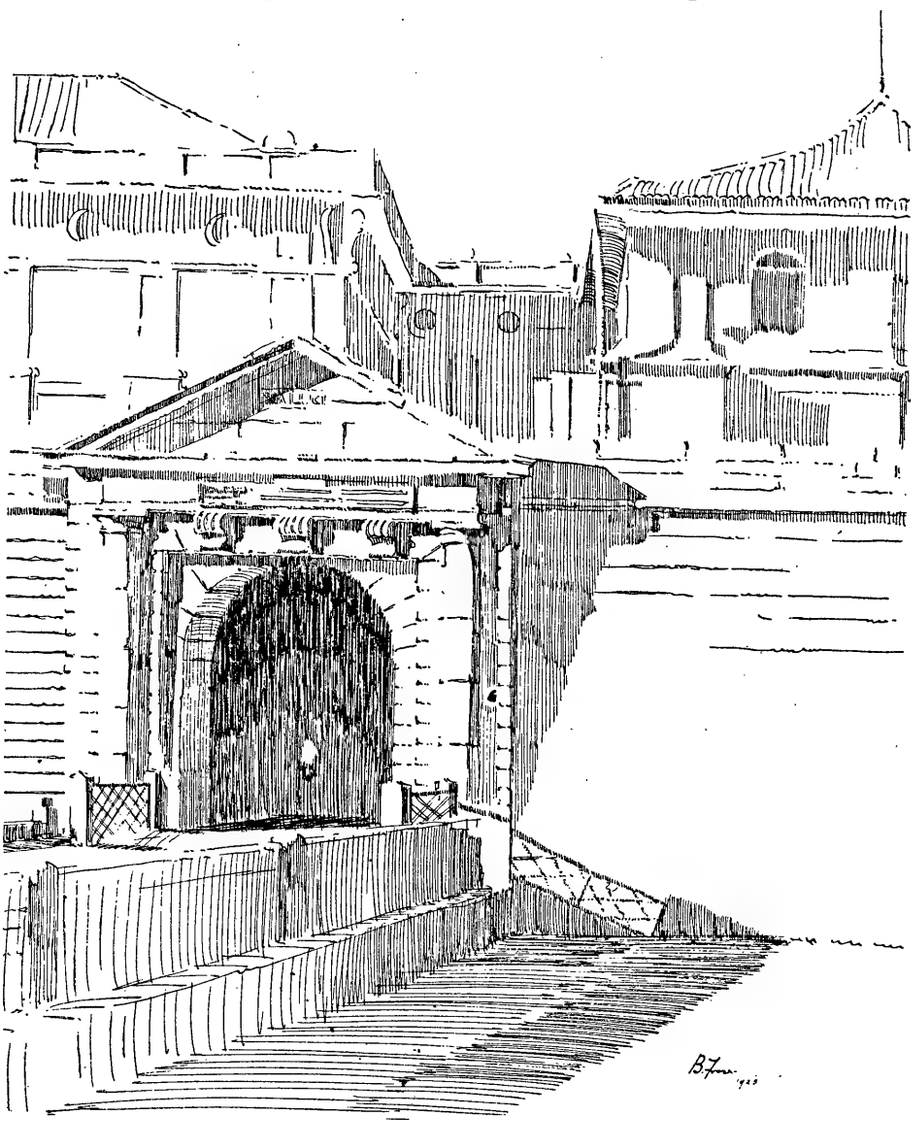
BIRKENHEAD.—The Sessions House is to be redecorated at a cost of £430.—Electric light is to be installed at the Infectious Diseases Hospital at a cost of £500.—The Borough Surveyor has prepared a report with reference to the development of the foreshore between Rock Ferry and New Ferry.—The Estates Committee have agreed to grant subsidies to the Dawson Birkenhead Houses, Ltd., in respect of houses to be erected in the town.—The Ministry of Health have sanctioned the borrowing of £87,163 for the Derby Park Housing scheme.—The Borough Surveyor is to prepare plans for a new road from Bidston Road, through the Shrewsbury Estate.—The Borough Surveyor is to ascertain the terms on which the Arrowe Park estate can be acquired for various municipal purposes.—The Board of Education have approved modified plans for the St. Peter's School premises providing accommodation for 690.

CROYDON.—The Electricity Commissioners have sanctioned a loan of £26,000 for showrooms and offices in High Street.—The Council propose to ask the Ministry of Health to hold an inquiry into the scheme for the purchase of land for the erection of baths at Addiscombe.—Plans passed: 25 houses, Elgar Avenue, for Mr. J. M. Alder; 6 houses, Briar Avenue, for Messrs. Young & Macintosh; 12 houses, The Chase, for Messrs. Young & Macintosh; 25 houses, Green Lane, for Messrs. Young & Macintosh; 46 houses, Barmouth Road, for Messrs. Crowley Bros.; 4 houses, Westbourne Terrace, for Mr. W. G. Gratton; 6 houses, Waddon Park Avenue, for Mr. G. Dales; 16 houses, Cedar Road, for Mr. P. Richardson; 17 houses, Grange Park Road, for Messrs. Scratchley Bros.; 22 houses, Tenterton Road, for Messrs. E. A. Bates; 12 houses, Limpsfield Avenue, for Mr. A. E. Stent; 15 houses, Morland Road, for Mr. P. Richardson; 12 houses, Beckford Road, for Mr. P. Richardson; 11 houses, Virginia Road, for Mr. W. G. Ingram; 6 shops, Lower Addiscombe Road, for Mr. C. Banks; cinema and dance hall, London Road, Norbury, for Mr. Jennings.

A Visit to Manila.

THE CATHEDRAL, MANILA.

After a period of four months in the ordinary town of Shanghai, it fell to my lot to pay a visit to Manila in the Philippines. I expected the town to be of the same type as the other Eastern ports and was most agreeably surprised when I arrived there to find, not a hotchpotch of Eastern and Western ideas, very badly mixed in the hurry to make money, but a very charming corner of old Spain with fortified walls, quiet streets, old churches, balconied houses, courtyards, and even the peculiar wrought-iron grilled windows, all of a piece with the charm of the Spanish



THE GATE OF ST. LUCIA.

A CHURCH AT MANILA.

town; these features too were enhanced by the mellowing of time, so that I felt, after strolling about, that I was really back in cultured old Europe again.

The Spaniards first came to the Philippines in 1586, and from the moment of their arrival must have commenced to Europeanise the Filipino in a very vigorous fashion, for the majority of the people speak Spanish and are Roman Catholic, every little village having its church, stolidly built in well-cut stone, standing in marked contrast to the rush and bamboo huts of the villages.

Whatever the methods of the Spanish priests were, one cannot help feeling that they must have been artists and scholars to have built such fine churches, and educated and converted the majority of these people to their religion.

Of course Manila has now outgrown the old walled city; the town proper is very much bigger and has now developed on the other side of the River Pasig, which flows into the sea at this point. Here the Americans have planted their samplers in their usual fashion, and although their buildings are very fine, some are perhaps too classic and others too Italian to suit the atmosphere of the original Spanish development.

However, the civic planning scheme for the harbour front which they have embarked on is a commendable effort, which, coupled with their other ideas for the advancement of the Filipinos and their islands, are surely not wasted examples of good administration, and it is puzzling to think that some of the Filipinos wish them to leave, for, without American ideas and capital, the people could certainly not develop schemes like these.

The sketches accompanying these notes show the Cathedral, a massive structure in yellow sandstone with the clerestory and dome in wood. It has a fine interior and is not marred by over fussy altar pieces common in Spanish churches.

The gate of St. Lucia is a charming example of a strong yet graceful feature so typical of the Spanish and Italian fortifications.

There are many churches in the old city, most of them having towers and cloisters with handsome palms in their enclosures.

B. FRASER.

From Last Week's "Architect."

There are many forms of lethargy: that which overcomes many after a banquet, that which assails those whom misfortune and disappointment deprive of hope, and that which seems to be the normal condition of many of our fellows.

The public regrets the good old pre-war days without making an organised effort to attain to a similar standard of well-being, an effort which is absolutely necessary if this country is to maintain the condition which it acquired.

Yet we are unable to discern in the public press anything but acquiescence in acceptance of conditions which are, we hold, abnormal or else a species of spiritless pessimism for which it seems there is little justification.

The whole position might be quickly changed for the better if we could only instill into the public the belief that it is useless to work for the benefit of any one section of the population independently of others.

The building trade operatives will not be benefited by higher wages and shorter working hours if there are few people who can afford to carry on building projects.

The tendency to invest liquid capital abroad where it is more lightly taxed is one which deserves the attention of all parties in the State.

It should be possible to demonstrate to the satisfaction of everyone that capital, whether possessed by the State or by individuals, is a necessity for the well-being of the community, which depends upon it even for the payment of doles to the unemployed.

It should also be possible to demonstrate that money paid away in taxation is money deducted from the fund which is available for the payment of wages, and that most of the alleged aims of Labour are illusory.

But we have hope that the clouds which seem dark around our national life will sooner or later pass away with the realisation that we are all component parts in the national machine, and it is impossible to make that machine do its work properly by giving undue attention to some of its parts to the neglect of others.

It would be regrettable if we had to think that those who gave their lives in the war included all of those who had unselfish thought for their country and had left behind them only the more ignoble and selfish in the nation.

The above are quotations from last week's issue, which included the following articles:

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UXBRIDGE.—The U.D.C. propose the construction of a reservoir on land adjoining Uxbridge common.—The infant welfare centre is to be enlarged, and tenders are to be invited forthwith for the work.—The Eight Bells public house, St. Andrews, is to be enlarged and improved by the Cannon Brewery Company.

LEEDS.—The Electricity Commissioners have sanctioned a loan of £250,000 for main extensions.—Preparatory plans have been approved for the lay-out of the Westwood Mount estate.—Plans passed: 34 houses, Chapel Allerton, for Messrs. Pickard & Co.; 2 houses, Aston Road, for Mr. William Price; 8 houses, Sutherland Avenue, for Mr. John Fletcher.—The Housing Committee have approved alternative designs by Messrs. T. Morley & Sons for four blocks of two houses in Bentley Lane, subject to the design of one block being modified to the satisfaction of the Borough Surveyor.—A scheme for the reorganisation and adaption of the Kidacre Street destructor is to be carried out at a cost of £26,500.—A committee are to report as to the need of library facilities at Beeston.—The Baths Committee have approved proposals for the erection of a gala bath in the city, and a site is to be secured for the purpose.—Tenders are to be obtained for the installation of atmospheric heating at Hunslet Baths.—Seventeen more hard tennis courts are proposed at various parks.—Sewage works are proposed for the sake of finding work for the unemployed.

Building Work Abroad.

By H. Guy Holt, A.R.I.B.A.

The carrying out of building work abroad necessitates greater organisation and knowledge on the part of both architect and contractor than is, perhaps, requisite to the same degree for work in this country, intricate and involved as modern building operations are.

This is true of work carried on in English-speaking countries, but the difficulties are greatly increased when the question of language crops up. In a country where one, or perhaps more, foreign languages are employed, in addition to this difficulty the use of the metric system, simple though it be in itself, often involves additional difficulty in the preparation of drawings.

Scale.

The chief difficulty to the architect is the realisation of the difference in scale. Here we are so accustomed to visualise our work in feet and inches, and it becomes a difficult matter to switch on to metres.

It will, perhaps, be a help to make a comparison. Our general drawings here are to $\frac{1}{8}$ inch scale, which closely corresponds with 0·01 metre scale. The latter scale is largely used by the French, who do not use a scale corresponding with our $\frac{1}{2}$ inch to the foot for details, but 0·02 metre for general drawings. They also use the scale "en plein grandeur," or full size for profiles of mouldings as we do, and a scale of 0·04, or $^1/_{25}$ full size for details. Assuming that our drawings are ready for estimating from, the preparation of the specification calls for special care so that contractors may realise the difficulties that have to be met.

Naturally we would not call for tenders from a firm of contractors who had no experience of the country, or work under similar conditions. If the job is to be worked from England it is necessary, previous to the preparation of drawings, that the architect, for preference, or some person who has technical building knowledge, visit the site and make preliminary inquiries regarding climatic, labour and other conditions, nature of site, and facilities for transport, local materials and cost. Water being a very important item, especially in the tropics, it should be ascertained what supplies will be available and if at a distance the cost of transport.

The writer once had an unfortunate experience of this. When on a job in Africa the cost of water transport *alone* came to £800, whereas about £100 only had been allowed. Having gleaned the necessary information and the preparation of the drawings reached the stage when the job can proceed, the specification will give as much information as possible, not only regarding the workmanship and material but also the sources of supply of material when available locally, local regulations and conditions.

In France and Spain and the colonies and protectorates of those countries bills of quantities, as we understand them, are not used.

A specification is prepared by the architect and a sort of schedule of the main items in the building work prepared, and the various contractors estimate according to these.

There is, as a rule, no "general contractor." The main trades are each contracted for separately, and the architect acts in the capacity of supervising clerk of works, his commission being anything from 7½ per cent. to 10 per cent. of the total cost of the work.

Assuming that the job is to be carried out from England by a British firm of contractors it is advisable to select a foreman who has a knowledge of the language, although this is not essential; it is much more important that he should be a reliable man of integrity and know his job thoroughly, as in all likelihood he will be called upon, not only to direct operations and supervise the local workmen employed but in many cases to "teach" them their job by practical demonstration.

Perhaps this point may be made clearer by mention of an actual job carried out by the writer where the chief foreman was a Welshman and the chief carpenter an Englishman; neither of these men spoke a foreign language: neither did the foreman plumber, plasterer, lift erector, or marble fixer who was sent out. The interpreter was a native of Gibraltar and a number of his fellow "Britishers" were employed on the job: the bulk of the tradesmen were French, Italian and Spanish, and the labourers comprised desert Arabs, Moors and Algerians, and one or two Maltese. The point I wish to make was that the chief foremen, in spite of the drawback of language, generally had little difficulty in getting the work done well, because they themselves set the example.

One thing we could never get the labourers to do. The main structure of the job was a reinforced concrete skeleton and flooring and the dumping of concrete from barrows on runways was not always done as well as could be wished, and *never once* did a labourer drop the barrow, turn round himself and pull it after him, as would an English bricklayer or labourer; *always* he had to turn round the barrow and push it in front of him back to the starting place. A little point, perhaps, but one which struck me very forcibly when I visited the job.

The Greatest Building in the World.

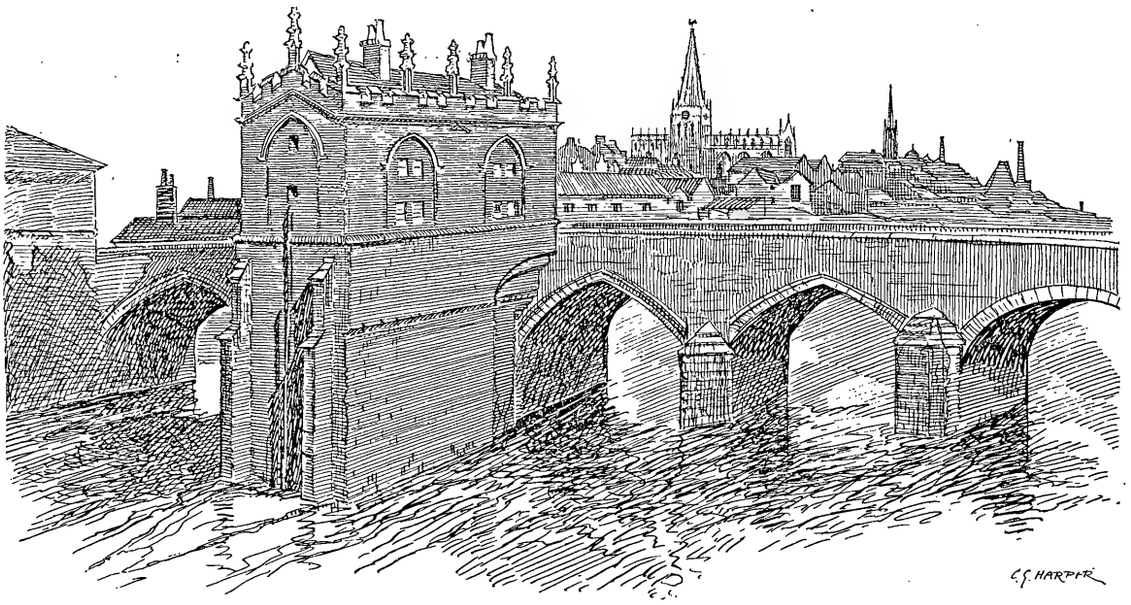
The greatest building in the world is that which has been proposed in Rome by an Italian architect of South American experience. The proposal is to build a block 80 storeys in height, with frontages of 1,000 feet, but we are not surprised to hear that financial difficulties are likely to make the accomplishment of the project difficult. It is, to begin with, difficult to secure a sufficiently large site in Rome, but that is probably the least of many difficulties. Large schemes have always appealed to the Roman mind, excited by remembrance of former days. Building activity was enormous in the decades which followed the union of the Papal States with the Kingdom of Italy in 1870, when the French defenders of the Papacy were forced to leave. The great Victor Emanuel monument is a sign of the same feeling, while in Southern Italy it is common enough to see enormous and ambitious gateways leading to what are only farms. Unfortunately for architects, trade is not necessarily promoted by enormous building schemes: were this otherwise, we should indeed be a fortunate profession.

"The Architect" Fifty Years Ago.

October 3, 1874.

Sussex Iron.

According to the "West Sussex Gazette" an effort is being made to restore to Sussex the ancient ironworks that formerly abounded, but which disappeared on the use of pit coal in the north for iron smelting. Several of the nobility and gentry of the county are subscribing towards the cost of the first furnace intended to bring about the desired revivification of iron manufacture, and that shortly it is expected the re-establishment will be announced of an industry in Sussex that in former years contributed so largely to its prosperity. Impossible as it may seem, the revolution of time is operating to bring again the splendid deposits of iron in Sussex once more into notice. The iron deposits of the Wealden district are among the most extensive in the United Kingdom, and although perhaps not the richest in the percentage of metal, are most valuable for their purity. The drawback has hitherto been the cost of fuel, but recent discoveries having overcome this obstacle, there is now no reason why the smelting of iron should not be resumed. Although chalk may not possess any intrinsic heat, yet it does contain a very great percentage of a gas which has, in combination with carbon, the most reductive action on oxide of iron, and is, in fact, the active agent in existing blast furnaces. As the chemical action is not dependent on the source whence the gas is obtained, but on its chemical properties *per se*, it results that as this gas can be as readily obtained from chalk as from coal the chalk, which has been well named "white coal," may come to play an important part in history. The construction of present blast furnaces is admittedly defective, being based on the old rule of thumb, but the introduction of practical chemistry has opened up a new field, which bids fair to render available the mineral wealth of Sussex, after a sleep of two centuries.



Rotherham Bridge Chapel.

The ancient chapel on the bridge across the river Don at Rotherham, built in 1483, and founded as a Chapel of Our Lady by Thomas of Rotherham, Archbishop of York, has just been restored and reconsecrated, after being left for close upon five hundred years in a desecrated condition. This chapel is one of the several surviving such Bridge Chapels in England and on the Continent, which testified to the old-time gratitude expected from—and let us hope duly expressed by—the wayfarer of former ages, when bridges were not altogether a matter of course. In their stead were the inconvenient and often dangerous fords; and when these were replaced by bridges, it was commonly the Church or pious benefactors impelled by the Church that performed these works of necessity and convenience. The wayfarers usually paid no stated toll, but offered thanks and money to the hermit or priest who generally served the Chapel.

When the Dissolution took place, under Henry the Eighth, the Bridge Chapel at Rotherham became, firstly, an almshouse, then a dwelling house, and afterwards, in 1779, was used as the Town Gaol. Hence the common name for the bridge "Jail Bridge." Some fifty years ago it became a shop; and as a tobacconists' shop it remained until recently. Some ten years ago it was proposed to bring back the chapel to its old use, and the Feofees of the Rotherham Common Lands, whose property it was, were memorialised by the townsfolk to permit this to be done. They acceded and made it over to the Church, upon it being understood that a local gentleman, Sir Charles Stoddart, and Mrs. Ingleby, were prepared to find the funds for restoration. It was in 1917 that the Chapel was thus made over. The restoration works, costing £1,565, have abolished all encroaching secular details, and have opened out some long closed windows. The Chapel, like the bridge, is built of red Rotherham sandstone.

Bridge building was always closely associated by our forefathers with public service and was one of the directions in which benevolent and philanthropic bequests were made. It was natural to give these a religious character by the erection of small chapels and it is most interesting to have a restoration which serves to remind us of an interesting and pleasing tradition. To-day in Burmah benevolence often takes the form of the gift of a bridge to the community, an idea which might suggest to a millionaire the provision of funds for a new bridge at Charing Cross, a project dear to the hearts of many, but one which in these times of difficult finance we may have to wait many years for.

WARWICK.—The Ministry of Health have sanctioned the proposal of the Town Council to erect a further 41 houses on the Emscote site and tenders are now to be invited.

Building Progress.

We notice that new premises are being erected in Blackfriars Road, near its junction with Weber Street, Mr. J. Parsons being the builder and Messrs. Gaskell and Chambers being engaged as hotel and bar fitters. Mr. J. Griffiths is the housebreaker and excavator.

The New Cross Kinema, in New Cross Road, is making good progress in the hands of Mr. J. Watt, the builder. The steelwork is being supplied by H. Young & Co., Ltd., and Henry Hope & Sons, Ltd., are installing the central heating and the hot water supply.

Messrs. William Mills & Sons are commencing the construction of a block of buildings in Blackheath Road at its junction with Greenwich and New Cross Roads.

Alterations are now in hand at Lovibond's brewery premises in Greenwich Road, the contractors for the work being Harry Groves & Son.

A large scheme of rebuilding is being commenced on the site of the recently demolished houses, Nos. 29 to 31 Essex Street, Strand. Bovis, Ltd., are the contractors for the works of construction, and Willment Brothers are doing the excavation.

Another large building, now in hand but in a much more advanced condition, is one at the junction of Portugal Street and the so-called "Clare Market," a thoroughfare that would fail to recall to anyone the once well-known district so entitled. This new block adjoins the W. H. Smith Memorial Hall in Portugal Street. It is stone-faced on both frontages, and is being erected by F. G. Minter; the steelwork is Lindsay's.

George Peabody certainly did not think that within so comparatively short a period after his death his trustees should wish, or would be allowed, to sell any of the erected dwellings for any purpose whatsoever. Yet the very extensive pile behind Victoria Street, Westminster, has met with such treatment, and is now being converted into high-class flats, to let (we are informed) at a rental bringing in about £150 per annum. The dull brick frontage in Caxton Street adjoining that interesting old building, the Bluecoat School (1709), has received a stone facing. The following are some of the firms engaged upon sub-contracts:—J. H. Nicholson & Co., Ltd., for heating; Finch & Co., Ltd., for plumbing; and four Stigler lifts, Mr. Marcel Porn being the sole concessionaire for these lifts in the country.

Messrs. Sims & Russell are engaged upon the renovation of Caxton Hall, Westminster.

Nos. 136–142 Victoria Street, Westminster, are to be pulled down and new shops and offices will take their place from the designs of Mr. John Stanley Beard, M.S.A. This should be an improvement upon the very dull appearance which this corner has for so long a period presented.

General News.

BALHAM.—The City and South London Railway have lodged revised plans for the Balham station which is to be in the High Road near the junction of Chestnut Grove.

BARKING TOWN.—Plans passed by U.D.C.: 18 houses, Hurstbourne Gardens, for Mr. Samborough.—The Council are to demolish eight houses and erect eight more on the Abbey Street land.—Tenders are to be invited for the erection of houses at Eastbury estate.

BARNSTAPLE.—It is proposed by the Devon County Council to erect a pavilion at the Hawley Sanatorium at an estimated cost of about £2,000.

BEXHILL.—The Town Council have decided to invite tenders for the erection of a pavilion in Polegrove.—Messrs. W. J. Simms, Sons & Cooke,, Ltd. are to construct a further six houses on the London Road site.—The Surveyor has been asked to prepare plans and estimate for covering in the Colonade and constructing a covered approach to and from Marina Court Avenue.

BOLTON.—The Borough Surveyor has been instructed to prepare plans for extending the fire station. A new sixty-foot road is to be constructed from Green Lane to Bradford Road.—The extension of the Chadwick museum is under consideration.—Plans passed: 26 houses, Bayswater Street, for Mr. J. Middlehurst; 12 houses, Ainslie Road, for Mr. A. S. Woods; 15 houses, Chorpey Old Road and Maple Avenue, for Bolton Modern Building Co., Presbytery Long Lane, for Rev. Father Lineham, shops, Gt. Moor Street and Newport Street, for Messrs. Waller & Riley, Ltd.

COVENTRY.—The Education Committee recommends application for loans in connection with the extension of Stoke Park School and for a scheme for the extension of Barr's Head School.—The Electricity Committee proposes extension of mains at a cost of £19,356.

DOVER.—The Council have passed plans for the rebuilding of the Archcliffe Fort Inn, Limekiln Street, by Messrs. A. Leney & Co.—For the erection of 15 houses at Dodd's Lane a tender of £8,169 is recommended, and for 10 houses in Buckland a tender of £6,637 is recommended.

ELLESMERE PORT AND WHITBY.—It has now been decided to erect a secondary school on a site to be obtained between Whitby and Little Sutton.—Plans passed: transformer house for Mersey Power Co., Ltd.; shop for Wolverhampton Corrugated Iron Co., Ltd.—Plans have been passed for subsidy houses to be erected by Mr. A. Donbavand.

GLASGOW.—Amended plans have been prepared for the erection of an X-ray department and an operating theatre at Robroyston Hospital. A site in Avenue Park Street has been purchased for the erection of a child welfare centre.—The Board of Health have acquiesced in the proposed extension of the Mount Blow Home.—The Corporation have received sanction from the Electricity Commissioners to borrow £1,850,000 for electricity purposes.—In connection with the scheme for a bridge across the Clyde at Dixon Street and the improvement of traffic facilities in the vicinity, arrangements are to be made for the removal of St. Enoch Parish Church. The Glasgow Institute of Architects has now urged the desirability of retaining and preserving the steeple of the church, and a report is to be prepared as to the possibility of doing so.—It is proposed that the new bridge across the river Cart shall be 60 ft. wide.—The Corporation are again being recommended to purchase the Harbour Tunnel undertaking, first proposed four years ago. The suggestion is that in view of the necessity for a bridge being erected at Finnieston Street the undertaking should be purchased for £100,000.—The Ministry of Transport have promised a grant of 50 per cent. towards the cost of erecting a bridge over the river Kelvin at Maryhill Road.—The Master of Works reports that the whole of the stonework of Kerklee Bridge should be overhauled with a view to preventing further decay and he has been empowered to carry out all necessary repairs.—It is recommended that the Corporation should proceed with the erection of the halls at Bridgeton in accordance with the design of Mr. C. Cowles-Voysey.—In connection with the allocation of a housing site for the erection of experimental houses, the Housing Committee recommend that Lord Weir be asked to erect, as he has suggested, nine houses at Langlands and another art Kelvin Hall, of steel design, and that Messrs. Cowieson, Ltd., be asked to erect a block of four houses in timber.—Subsidies are promised in respect of 24 houses to be erected at Cathcart by the Southern Building Company.

HAWKMOOR.—The Devon County Council propose to enlarge Hawkmoor Sanatorium by the provision of accommodation for 32 children.

ILFORD.—Plans passed by U.D.C.: 85 houses on Hazelbrook estate, for Mr. F. D. Pipe; extension Wesleyan Mission, Youngs Road, for Mr. S. P. Dales; 5 houses, Horns Road, for Mr. C. Genever; 16 houses, Stainforth Road, for Mr. F. Fortesque; 10 houses, St. George's Road, for Mr. A. P. Griggs; 20 houses, Ethelbert Gardens, for Messrs. P. E. Brand, Ltd.—The council have applied for sanction to borrow a further £100,000 for advances under the Small Dwellings Acquisition Act.

LLANDUDNO.—Lloyd's Bank have instructed their architect to prepare plans for a premanent building at the Craigydon sub-branch to replace the present temporary premises.

MANCHESTER.—Additional baths are to be provided at Osborne Street at a cost of £581.—New heating apparatus is to be installed at the Cheetham Town Hall at a cost of £1,100.—The Holmes Chapel Training School is to be improved and extended at a cost of £2,000.—The Baths Committee have approved an amended plan submitted by the City Architect, showing the substitution of reinforced brick in place of ordinary brick in the construction of the public washhouse at Moston, with a view to meeting the wishes of the Ministry of Health in regard to labour.—Plans have now been prepared for the erection of schools at Gordon Mount, Wilbraham Road, and Claremont Road.—The Libraries Committee have approved plans for the new Withington Library.—Plans have been approved for bowling houses and tennis pavilions to be erected in various parks.—A report is to be prepared as to extensions at the Abergele sanatorium.—Schemes have been prepared for a new valley road from Smedley Road to Lower Crumpsall, and a new road from Harpurhey to Lightbowne.—Plans passed: 6 houses, Polygon Road; 11 houses, Moreville Road; 14 houses, Alexandra Road; 21 houses, Wellington estate; 103 houses, Cringle estate.

MERTHYR TYDFIL.—The Housing Committee are considering the site of the proposed 90 houses to be built for people displaced from insanitary areas to be cleared.—Plans prepared by Messrs. Johnson & Richards, the architects, for the proposed central library, have been submitted to the Carnegie Trust and the Library Committee has now decided upon a site at St. David's.

MONKSEATON.—The Whitley and Monkseaton U.D.C. have passed the following plans: 12 houses, Caldwell Lane, for Mr. R. J. Hogg; 6 houses, Dene Crescent, for Mr. R. Osnard.—A bowling green is to be constructed on land now being laid out at Helena Avenue.

POPLAR.—A loan of £34,000 is also to be sought for plant in connection with electricity development.—Baths are to be erected in Wick Lane at a cost of £1,474 for land and £6,000 for buildings.—Plans agreed to: addition to Nelson House, Cold Harbour, and addition to buildings, Limehouse Pier Head, for the Port of London Authority.

SALFORD.—Modern kitchen equipment is to be provided at the Ladywell Sanatorium at a cost of £1,710.—The Education Committee proposes the purchase of "Springfield," Pendleton, for a site for a proposed school for crippled children.

SANDERSTEAD.—Plans passed by U.D.C.: 6 houses, Britton Hill Road, for Mr. Y. Thomas.

Trade Note.

Door and Window Fittings have been specified by architects in accordance with period designs, but the objection to making these in brass has been cost; consequently manufacturers, in order to meet the demand for something more economical, have been forced to use iron, which, however, while proving satisfactory when coated with "Art Black" is still prone to rust. This has been found to be the case in residences and buildings near the sea or in smoky or chemically filled atmospheres; likewise in damp areas, low lying districts, etc. So much this being the case that frequently we are asked to supply door and window fittings galvanised, write Messrs. Parker, Winder and Achurch, of Birmingham. Galvanised fittings, while fulfilling the purpose, do not add to the æsthetic appearance. We have, therefore, put upon the market Parwinac Rustless Finish containing chemicals which enable us to guarantee any fittings thus coated to be permanently rustproof. In appearance, while we find it impossible to give the "Art Black" finish, the Parwinac is less obtrusive than japanning and borders upon "Egg Shell" Black. It has a smooth-like surface which is easily cleaned down and polishes beautifully. The Parwinac Finish can be applied to interior and exterior fittings and heralds a big advance in the improvement, efficiency and durability of door and window fittings generally. The extra cost involved on casement fastenings and stays would be approximately 1s. per dozen.

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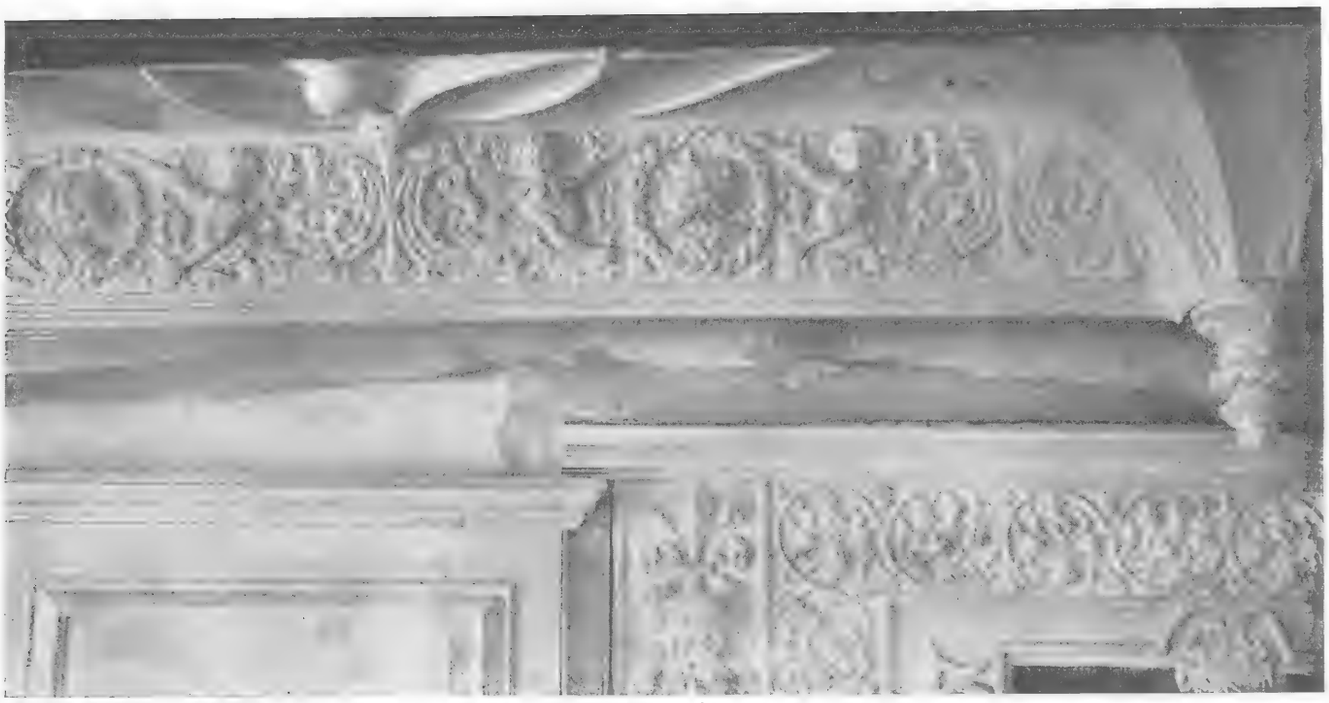
Early English Renaissance Decoration.*



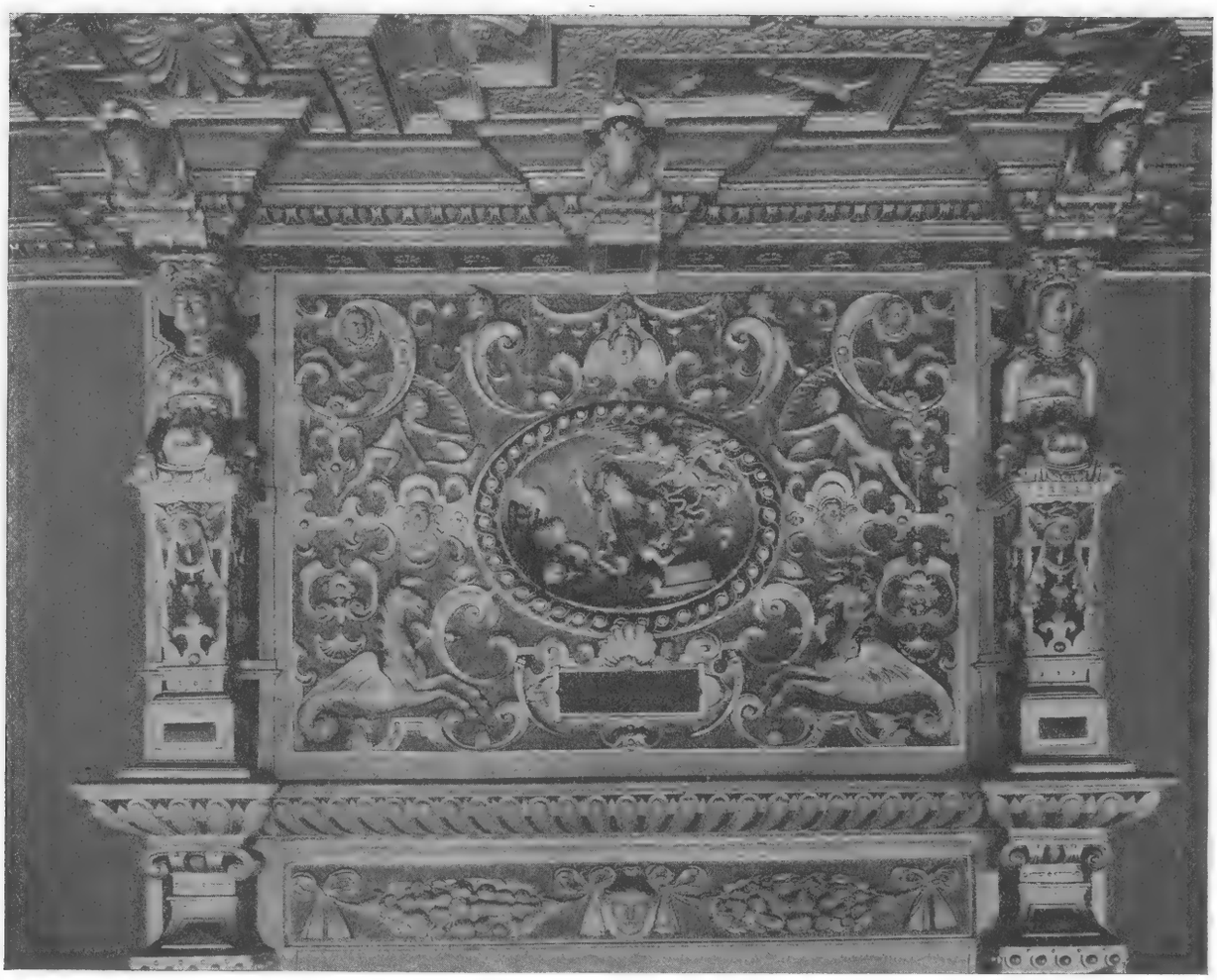
DETAIL OF PLASTERWORK IN BEDROOM AT MAPPERTON, DORSET. SECOND HALF OF 16TH CENTURY.

This volume covers the period between the last years of Henry VII.'s reign and the end of the Commonwealth, a period the work of which has left an indelible trace on English architecture and has unquestionably strongly influenced the later phases of Renaissance development. Without the riot of fancy and quaintness of the architecture of Elizabethan and Jacobean times the subsequent development of style would unquestionably have taken severer forms. The early Renaissance was at one and the same time a protest against a system associated with a form of faith and an expression of the joy of living in the midst of a new commercial prosperity.

Typically English as it was in its spirit it borrowed without hesitation from the wealth of suggestion afforded by contemporary building in lands whose political conditions were less stable. It was also typically English in being the expression of those who possessed means rather than of an aristocracy or a Court, while the national tendency to arrive at compromises was constantly manifested in its varying forms. Even in the present times, when we seldom employ its details, its lessons in the picturesque arrangements of form very sensibly influence our imagination, and our love for dormers, gables and mullioned windows are directly attributable to the memory of the work of an earlier age.

Our early Renaissance architecture is always interesting, usually quaint and homely and seldom grand or unduly ambitious, and that fact has undoubtedly brought it nearer to the affections of the English people than any outstanding quality of æsthetic merit would have done. Its best work is to be found not in the more ambitious buildings of the aristocracy but in the smaller manor houses and inns scattered over the length and breadth of the land, in an occasional chimney-piece or staircase which has escaped the ravages of time, in quaint doorways and bays of every variety of shape and in ceilings which are hard to surpass in their soft harmonious richness of rounded form. Its simpler and less ambitious efforts are almost always admirable, while its richer and more ambitious attempts to imitate little understood niceties of classical form are often but grotesque travesties of a style which was not understood. For example, its most successful chimney-pieces are those like that from Otford Castle, Kent, and that from a house in Bristol, No. 202, or from Fore Street, Ipswich, No. 200, in which a flat arch is used either simply in connection with panelling or with small carved decoration or strapwork rather than in such compositions as the chimney-piece from Langton House, No. 207, in which more ambitious attempts to use little understood classic forms were attempted. Its greater staircases were similarly often marred by the immense exaggeration of newels and other features, as at Astonbury, No. 247. Coarse and exaggerated balusters frequently mar a design, but at its best in such design as that of Cromwell House staircase, No. 248A, and that of the Blessed Trinity at Guildford, No. 251, and the exquisite staircase at Albyns, Essex,

* "English Decoration and Furniture of the Early Renaissance, 1500–1650," by W. Jourdain. B. T. Batsford, Ltd. £3 net.



UPPER STAGE OF CHIMNEY-PIECE, THE STATE ROOM, BOSTON HOUSE, BRENTFORD.

(Subject of central panel: The Sacrifice of Isaac.)

the craftsmen employed have achieved triumphs. Very often, too, we have examples like the well-known staircase of the Charterhouse where the general form is excellent but the detail exceedingly coarse.

The less ambitious screens are usually far more pleasing than those of greater size and elaboration, like that of Burton Agnes, Yorkshire, No. 240, which is overloaded with decoration employed with a Hindu-like profusion.

The decorated and moulded plaster work of the era was undoubtedly some of its finest work, for the limitations and opportunities of the craft of the plasterer have not been better understood in any age. Plaster, which could be shaped into any decorative form, appealed to the craftsman of an age whose fancy and imagination were paramount qualities, while the nature of the material toned down the tendency to crudeness which militates against the excellence of much of the earlier work.

The achievements of the period may be said to be due in greater measure to the work of craftsmen than to that of the master mind of a designer of buildings. In great and ambitious schemes we are constantly reminded of the fact that the size of buildings had rendered their general conception and plan matters of paramount importance before the architect of later epochs had come on to the scene to plan buildings as completed wholes. Had the age produced a Wren, Inigo Jones or Chambers, there is little doubt that we should have had great outstanding monuments of an age whose smaller and less ambitious work is so full of charm. As it was, amateurs and patrons wanted ambitious schemes, costly and elaborate in their nature, and craftsmanship alone could not fill in the gap.

It is possible that had not the work of earlier periods been quickly superseded by more classical types of design the earlier Renaissance in England might have been displayed in far better compositions than are left to us, for it contained the possibilities of much greater development than any which we reached. It influenced later work, but had passed away before it had reached a possible and legitimate climax. Miss Jourdain's book is divided into twenty chapters, among them ones dealing with Foreign Influences, Woodwork, Carving, Inlay, Decorative Painting and Colouring, Plaster, Glass and Glazing, The Chinmey Piece, Interior Porch Screen, Doorway and Staircase, while a second division of the book deals with the Furniture and Metal-work of the period.

Like all of Miss Jourdain's work the book bears the trace of great care and scholarly knowledge of her subject and forms a useful and attractive record of one of the most interesting phases of our natural art. Over 400 illustrations are given, many of them being useful scale drawings, and it is a work which will be a welcome addition to any library of architectural books.

THE SOUTH ROOM ON GROUND FLOOR, SLYFIELD, SURREY. MID 17TH CENTURY.

Our Illustrations.

THE GOVERNOR'S RESIDENCE, PRETORIA. HERBERT BAKER, A.R.A., Architect.

WOMEN'S INSTITUTE AT MILFORD, SURREY. BAILLIE SCOTT & BERESFORD, Architects.

HOUSE AT WIMBLEDON. P. D. HEPWORTH, Architect.

Notes and Comments.

Leicester.

Among many dolorous accounts of bad trade in different parts of the country, of mines closed down and furnaces damped out, it is pleasing to come across exceptions to the chorus of woes. Such an exception is provided by Leicester, where, we hear, the factories are all busy and the machinery manufacturing works full of orders. This has been effected in no small measure by the alertness and energy of the citizens of Leicester and their determination to fit themselves for an intensive struggle under modern conditions. Leicester, with a population of nearly a quarter of a million, and Nottingham, now hard hit by adverse conditions affecting its staple industry, are the two most important and progressive towns east of Birmingham, and in its standard of general well-being and comfort Leicester is probably more fortunately placed than almost any other town in the country. The Building and Decorative Exhibition to be held at Leicester, which will open next Wednesday, is held with the direct support of the Leicester Housing Committee and the Leicestershire Association of Architects, and is, we are glad to note, to comprise no side-shows or amusements, but will be devoted to business. The great housing programme to be carried out by Leicester makes the holding of the exhibition at the present time unusually appropriate.

The Unwanted Child.

It appears certain that most people do not want certain things. They have no desire to see the Labour Government with a longer spell of office. They have no desire for an autumn election. They do not quite see why Liberals and Conservatives who are in agreement in condemning certain Labour proposals should not carry on the Government of the country until next year before appealing to the electorate, and they have no great love for a three-party system and government by a militant minority. Yet we seem likely to have a General Election, with its series of three-cornered contests between antagonists two of whom are in general agreement but have a modest shrinking from openly stating the fact, and so we may be committed to a state of things objected to by a great majority among that minority who think at all!

"Dorlonco" Housing.

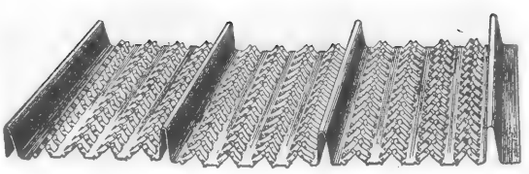
No. 1. STEEL FRAMEWORK.

Some five years ago, when housing commenced to receive much needed attention, a scheme known as the "Dorlonco" system was introduced and patented by Messrs. Dorman, Long & Co., Ltd., of Middlesbrough, in conjunction with the well-known firm of architects, Messrs. Adshead & Ramsey. This scheme was evolved by Messrs. Dorman, Long & Co., Ltd. (when deciding to extend their own village at Dormanstown, near Redcar, Yorkshire), who, appreciating the general necessity for such a system, decided to place the construction on the market in order that the public might also derive its advantages. The wisdom of this action can be gauged from the fact that within the first two years or so of its introduction very nearly one hundred schemes, covering several thousands of houses, were completed. A number of the schemes were for important corporations, such as Birmingham, Middlesbrough, Liverpool, Gloucester, etc., etc., and also several for large colliery districts. With the present recrudescence of housing activity, it is perhaps opportune to refer again to the system itself.

The basis of the construction is a framework of steel which is simple, yet substantial, and is absolutely self-contained, as will be seen by the illustration No. 1. This represents the framework of a pair of houses and was erected by four men in three days without the aid of plant. The steelwork is supplied by Messrs. Dorman, Long & Co., Ltd., ready for erection. To this steel structure on the outside is attached the Hy-Rib reinforcement, which is concreted to a thickness of 2 inches, forming the outer wall. An inner wall is formed of breeze slabs, providing a $4\frac{1}{2}$ inch cavity and giving a total thickness of $8\frac{3}{4}$ inches, which guards against condensation.

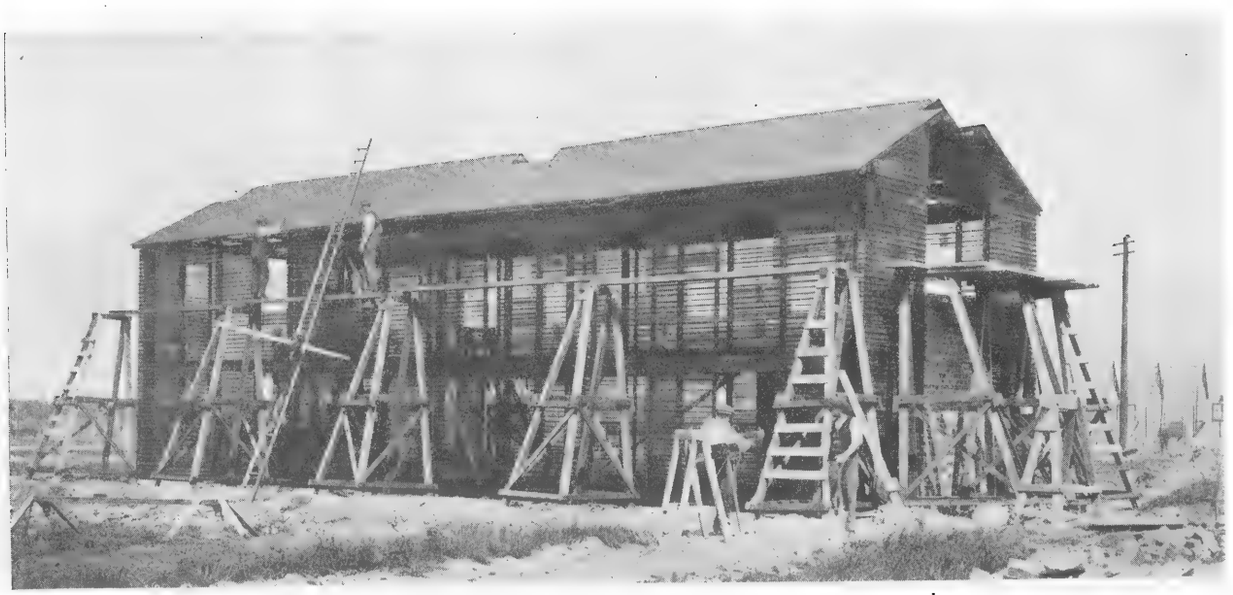
With regard to the floors, Hy-Rib is used and is fixed, lath surface downwards, by means of plate clips. The concrete is then applied to a thickness of $2\frac{1}{2}$ inches, and after removing the temporary brace, a $\frac{1}{2}$ inch render coat is applied to the underside. The whole operation is simplicity itself and, practically speaking, constructional timber is eliminated—close-boarded shuttering being unnecessary with Hy-Rib.

So far as the roofs are concerned, these were constructed in some cases of concrete reinforced with Hy-Rib—in others, with ordinary timber and tiles or slates. The mention of roofs recalls to our mind a letter which recently appeared in "The Times" to the effect that it would be of



HY-RIB.

considerable assistance if a system of house construction could be forthcoming which would enable the roof to be put on in the early stages of construction so that work could be proceeded with in spite of bad weather. This was always one of the strong points of the "Dorlonco" system, and illustration No. 2 shows the framework erected—the Hy-Rib for the walls fixed ready for plastering—and the roofs completed. It will readily be appreciated that this is an instance where delay need not occur because of weather conditions, as the steel frame can be erected complete,



No. 2. STEEL FRAMEWORK WITH HY-RIB REINFORCEMENT FIXED READY FOR PLASTERING.

A HOUSE ILLUSTRATING APPEARANCE WHEN FINISHED.

independent of any other material used in the construction, and the roof can be covered if necessary previous to forming the walls, floors or partitions, enabling all internal work to be done under cover. The houses are fireproof, there being practically no timber introduced, other than doors and stairs. They are hygienic, being vermin and damp-proof from top to bottom.

To be successful to-day, any system of house construction must first of all be rapid. We now deal with a construction which has proved again and again that it can be carried out very much more speedily than the ordinary brick house. It is interesting to record that the scheme comprising over 400 houses which was carried out for the Corporation of Middlesbrough was completed in record time and was in all probability carried out more rapidly than any other scheme in the country which was at that time in progress. Combined with speed of erection, this system is also economical, and bears comparison with anything else, including brick, at present on the market.

The system, being a scientifically considered one of construction, gives as much opportunity for design by the architect as a building of ordinary materials. Any type of window, wood, steel, sash or casement, may be used in buildings constructed under the system, and any method of finish is applicable to the outer walls. Roofs in the same way may be tiled or slated, the architect's design being in no way hampered by the form of construction adopted.

Old London at Wembley.

It has occurred to us that when the authorities have no further ideas about the Wembley Exhibition they might consider the suggestion of reconstructing the ancient City of London in some parts of the grounds as a permanent exhibit. If faithfully executed such a scheme would be of great interest and educational value. Pageants of historical interest could from time to time be held in a truthful replica of their original setting. Shops could be let just as the old London Bridge in the present show, as income producing positions of this character. We would suggest that the upper floors overlooking open spaces in the reconstructed city be so constructed so as to accommodate audiences who would view plays or parts of historical scenes that might from time to time be played with their original settings. The enterprise could be used by many film producers who desired to stage stories which were connected with London, and the rents derived from such a hire of the city would be a useful source of income. The possibilities productive of interest are almost unlimited. When we reflect upon the history of our City of London. Some artistic licence might be necessary with regard to the periods, but our suggestion would be that where a complete section could be a truthful representation of a definite date which contained many episodes of historical value, that period should be represented. But as every city has constantly been subjected to changes some licence would be necessary. The subject is too complicated to be considered in this suggestion in detail, but we have no doubt that if treated with a broadminded spirit the success of the enterprise would be absolutely certain.

ASHBURTON.—At the Grammar School steps are to be taken for the erection of a new house with accommodation for boarders and the Devon county architect is to assist the governors by the preparation of plans and estimates.

STOKE-ON-TRENT.—Sanction has been given for a loan of £7,500 for the erection and equipment of an elementary school at Oakhill.—The Cannon Street brickworks are to be purchased for £5,700 and a depot is to be established there at a cost of £750.—The Star and Garter Road at Longton is to be widened at a cost of £22,500.—Extensions and improvements are proposed at the Etruria gas works at a cost of £64,000—Plans have been passed for a bridge over Elgin Street, Stoke, for the Empire Porcelain Co., and for alterations at the Imperial Picture House, Burslem.—The medical officer of health is to prepare a scheme for a centre for the treatment of venereal disease to be erected on a site to be decided on, and the Borough Surveyor is to prepare estimates as to cost.—The Borough Surveyor has prepared plans for nine houses to be erected at Hill Street, Burslem.

Aquatint Etching.

J. R. Hutchinson.

In my previous article on " Etching " I said I would give one more article, on Aquatint etching, and I will not begin by describing the process in detail, so that you may be able to take up the work if you are so inclined. I think the process is particularly suited to those who prefer tone work to line work, as in aquatint there are no lines, it is all tones. When I say there are no lines, I mean that there are no lines to represent the tones, but I do admit that you must have an outline drawing of your subject on the copper plate, but it is only used as a guide to your work.

The first thing you must get, or make, will be what is called the " Dusting Box." Get a wooden box, in size about 18in. square, or you can get an old tea chest from a grocer perhaps, made of stout boards, that would answer equally well. Now you want to make a hinged flap at the bottom on one of the sides so that you can open or shut it when wanted. The next thing you must get will be the powdered resin you use for laying the aquatint ground, and this you must get from A. W. Penrose, 109 Farringdon Road, London, E.C. Their resin is much the best of any, so do not get any other sort. I found that till I used their resin my results were very uncertain. Get 2 pounds of their resin and put it into your wooden box, and now you must have, or get, a pair of good-sized bellows and insert it into the box by opening the flap at the bottom of your box, and proceed to blow with your bellows upon the fine powdered resin; you will in this way raise a fine cloud of the resin in the box; blow with your bellows several times, moving the bellows along the box so as to distribute the resin evenly all over.

And now about laying the ground on your copper plate. We will suppose you have been blowing with your bellows till you have got what they call a good " smother "; you then insert your copper plate into the box as quickly as you can, as in that way you get a better texture into your ground by letting it catch the coarser grain. Now you must let your copper plate remain in the box for 30 seconds I hold the copper plate by letting it lie on a board, so as not to let your fingers touch the plate. Take it out at the end of 30 seconds and give another " blowing up " with your bellows, and, when that is done, put in your copper plate again and give it another 30 seconds. You must repeat this process four times altogether. Your copper plate should now be covered completely with a fine and even surface of powdered resin of a creamy white colour.

Now the next thing is to heat your copper plate, over your gas stove, or oil stove, and it must be done in this way; you will notice that the ground when it gets heated will change colour and become quite transparent; directly this takes place you must remove the copper plate, as with too much heat the ground will melt and run into solid, and so prevent the acid from attacking the copper, so, when you see that the ground has changed colour all over the plate, take it away and let it cool of itself. The plate, when cold, should have a nice granulated texture, with a slightly roughened surface. You can practise laying grounds at first on small bits of copper, and " biting in " with your acid so as to get your " test plates," with your different degrees of biting, and until you have got these done you cannot tell how long to give to get your different depths of tones. I generally give for my " bitings " 2, 4, 7, 10, 15, 20, 30 minutes " biting in " in nitric acid bath of a strength of 3 oz. of acid to 4½ of water. In the cold weather the biting will be much slower, and I find it better to warm the acid bath just a little bit so as to make it about 60 F. but not more.

We will now suppose you have made your test plates with your different degrees of biting and you wish to make an aquatint of some sepia, or colour, sketch of architecture. So you must make a tracing of your " subject " and lay an ordinary etching ground on your plate, and smoked in the usual way that I have before described. You put a piece of black transfer paper next to the copper plate, on to it you lay your tracing the reversed way, if you wish it to come out the same way as your sketch. Now with an H.B. pencil you go over your tracing and so transfer the outline on to your " ground " on the copper plate. You can now with your etching needle draw your outline of your subject on your copper plate. Having done that, you are now ready to " bite in " the " subject," and to do this I think the Dutch Mordant bath will be best, and, as you only want a fine outline as a guide for your work in the aquatint, you need not give more than 20 or 30 minutes biting. Having done this, you can take off your ground, and you will now have your plate ready for the aquatint ground.

Clean the copper plate first with turpentine, and finish with whitening. You are now ready to lay your acquatint ground in the way that I have described, namely: putting it four times into the dusting box and giving it 30 seconds each time. Then heating it in the way I have already described, and your plate will now be ready for the biting in process. You can see your outline of your sketch quite clearly through the aquatint ground.

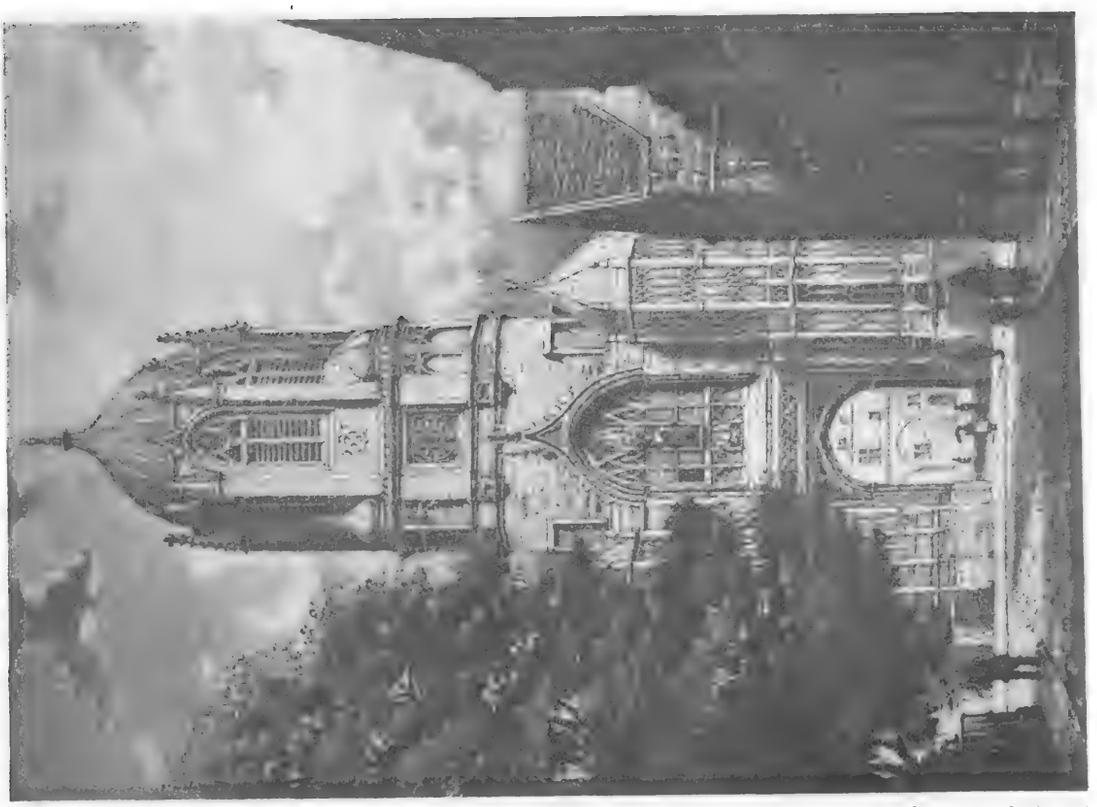
Now, before you begin to do the " biting in " process, you will have to do some " stopping out " work with your stopping-out varnish, for which use Rhind's, of 69 Gloucester Road, Regent's Park, N.W. Now you must paint out with a fine sable brush all the parts that are to be left quite white in your subject, such as the sky and all the high lights; this is to protect them from the acid bath, as the copper plate must be left untouched in all those high lights, also paint over the margins of your plate, and the back of the plate. It will now be ready to put it in your nitric acid bath, made up of 3 parts acid to 4½ parts water. After it has been in the bath about half a minute the surface of your plate will have a frosted appearance due to the formation of the air bubbles caused by the acid attacking the copper; these you must brush away with a feather as they form; when the plate has been in about 2½ minutes, take it out and put it into a dish of plain water, to get rid of all the nitric acid. Rinse it well, and then take it out and dry the surface with some clean blotting paper. The plate will probably look discoloured in parts, but that does not matter at all. Now, with your stopping-out varnish, you must paint out all the work of your very finest tones, and, when that is done, give it another " biting in " of 2½ minutes, and take it out and stop out the tones of the next degree of fineness, and so you go on " biting in " and " stopping out," till you have got only the deepest tones left. Do not give more than 30 minutes to your deepest bitings, as the resin ground will not stand more than that. The plate during the " biting " will tell you nothing, as it looks the same all though. That is why you must go entirely by your test plates when you are " biting in."

Having done your " bitings in," you are now ready to remove the ground, which you do by heating it and pouring paraffin oil over the surface, and, with some cotton wool, removing all the ground; you will now see your work for the first time, and you will think at first the thing is a failure, as all the light and delicate parts will look quite dark; but this is only a surface discolouring. You must now get some fine emery powder, and with some fine cotton wool and oil rub hard all over the plate; that will remove the discolouring of the light parts, and you will then see your plate beginning to look more like your sketch. Most likely the dark parts will not be dark enough, and will want deepening, and the light parts, I dare say, will want to be lighter; and, to do that, I find going over them with the finest emery or sand-paper will reduce them, and use the scraper and burnisher as well to reduce parts. Be very careful in using the sand-paper not to scratch the surface of the copper; so bear lightly, and rub a little oil on the sand-paper and the plate before using it. If the darks want to be strengthened, as they generally do, you must lay another ground on your plate in the same way as before, and you must paint over all the parts that do not want " rebiting " with your stopping-out varnish. This will

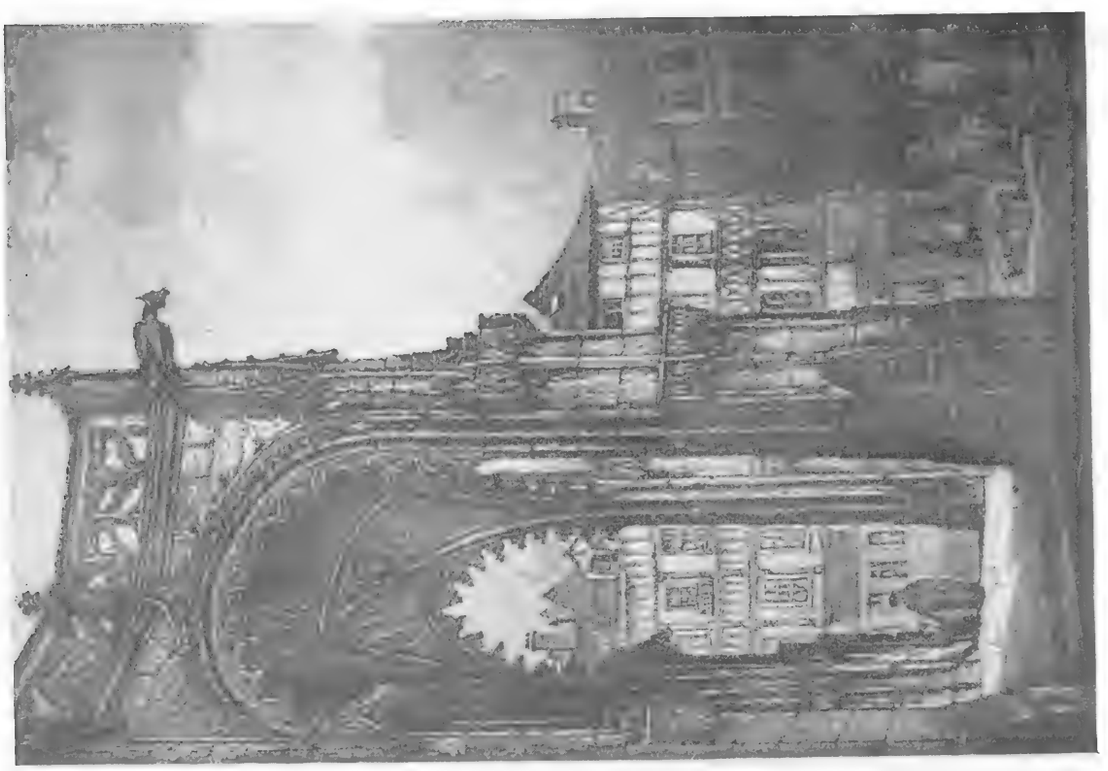
MARKET CROSS, WINCHESTER.

WINCHESTER COLLEGE WAR MEMORIAL.

AQUATINT ETCHING. By J. R. Hutchinson.



TOM TOWER, CHRIST CHURCH, OXFORD



ST. VINCENT CHURCH, ROUEN.

AQUATINT ETCHING. By J. R. Hutchinson.

COLUMBIA UNIVERSITY AVERY

protect them from the acid and leave the acid to attack all those parts that you want to be stronger and darker, and I find that touching up some of your outline drawing with a few crisp, firm lines gives a very nice effect; all hard edges you can remove with the scraper and burnisher, and the larger masses that want reducing I do with the fine emery paper. In the illustration I have given—the one of Tom Power, Christchurch, Oxford—I used a good deal of the emery paper to reduce the sky in parts, and the same in the sky of the other illustration of St. Vincent Church Porch, Rouen.

The Tom Tower plate was published by Ryman & Co., of Oxford, and was 14 by 10 inches in size; also the other one was the same size.

The one of the War Memorial of Winchester College was published by W. H. Beynon & Co., of Cheltenham, and was 9 by 7 inches in size. The other one of the Market Cross, Winchester, is the same size, viz.: 9 by 7 inches.

In the two former illustrations I used in the making of my outline drawing on the copper plate what is called a soft ground etching ground. It is a ground made up of the ordinary etching ground mixed with an equal amount of tallow wax. The ground is laid in the ordinary way, and you put a piece of tissue paper on the copper plate, and then your tracing of your subject. You then, with a "H" pencil, go over your tracing, using a fair amount of pressure all the time, and in this way the tissue paper next to the ground will pick it up, leaving the copper exposed. You get in this way a nice broken line resembling pencil work; you "bite in" the work with your nitric acid bath, using equal parts of acid and water.

I think the process is very suitable for architectural sketches, as you can get the crumbling character of old stonework nicely suggested. The ground is very delicate, and you must use a hand rest when drawing on your copper. In all etching work you will have many disappointments at first, and your motto must be "experientia docet."

Roberson & Co., of Long Acre, London W.C., will have several books on etching, and one by Paton is very useful.

Correspondence

[*The Editor will not be responsible for the opinions expressed by Correspondents.*]

Problem of the Times.

To the Editor of THE ARCHITECT.

DEAR SIR,—In your leading article published in your issue of October 3 you make a suggestion about what in your opinion should prove to be a better method of taxation than our present Income Tax. You write "Would it not be wiser to say we will not tax your income insofar as it is derived from commercial undertakings in the country but will secure the necessary money for the State by taxation based on your expenditure." At first this idea might appear very sound, but on close examination it would be very destructive to every interest. If the taxation were based on expenditure local trade would receive a terrible setback all over the country; everybody would spend less, with the natural result that employment would decrease and unemployment increase. The burden of the very few very rich does not need sympathetic consideration, what is needed is a lightening of the burden of the masses who carry on small businesses, and who, under the burden of taxation have been obliged to dispense with all labour that could by additional personal effort be spared. These enterprises also suffer from the heavy burden of taxation with respect to any idea of expansion. Unemployment cannot be mended unless the small enterprises all over the country absorb the local workless. Big schemes can only be temporary because vast numbers are totally useless for manual labour of any kind, but could be very usefully employed in small local industrial work for which they very probably have been specially trained. Everybody seems to think that our troubles can be mended by some big effort, enterprise or change, but the sooner small enterprises are encouraged and assisted, trade will improve all round. Another difficulty with regard to your suggestion occurs, what are "Commercial Undertakings"? In a general sense they would mean every form of capital investment other than Government Bonds. This would naturally not tend to increase the popularity of such last named investments, with the result that they would depreciate in value very considerably, and our credits abroad would not be improved by such a depreciation. Further, all unearned incomes derived from commercial undertakings would be freed from taxation, which the longer one contemplates the possibilities of such a situation arising the greater the conviction becomes manifest that our present system is better than your suggested improvement.

Yours faithfully, etc., etc.

CONTENTED.

Architectural Competitions.

To the Editor of THE ARCHITECT.

DEAR SIR,—In the October issue of "Architecture," the journal of the Society of Architects, the Editorial Comment is mainly devoted to the time-worn subject of Architectural Competition, whatever evils they may possess or whatever the cost may be to the non-successful. One architect or one set of architectural partners is lifted out of the masses and given an opportunity. If he is already a well-established professional he has merely proved his value as something above mere good fortune and favourable circumstances. He has taken his chances with the crowd and proved his worth. If he is a totally unknown member of the profession he will by his merit and ability be a welcome addition to those already recognised as having all the essentials necessary for a successful architect. Do not let us think of limited competitions which will bar the unknown from all hope of recognition and will add still further fuel to the ever increasing realisation that without money and social position architecture as a profession offers very little. So long as competitions are open to all, so long is there a gate and a passage through which men of real ability without money or social influence can reach the topmost rungs of professional fame.

Yours faithfully, etc., etc.

THE YOUNGER GENERATION.

Telephone Developments.

The formation is announced of the Telephone Development Association. Explaining its objects, Sir Alexander Roger, the Chairman, said in an interview "The Association has been launched by British manufacturers who are interested, directly or indirectly, in the telephone industry. We hope that it will speedily develop into a recognised central body dealing with all questions affecting the industry in relation to the requirements of users. It is universally agreed that rapid communication of all kinds are an index of national progress, and from this point of view it is unsatisfactory that Great Britain should not be leading the way in telephone usage. While the British Postal and Telegraph Service is admittedly the best in the world we are woefully behind in the use of the telephone. In point of fact we have to-day only 21 telephones for every 1,000 inhabitants, as compared with 59 in Norway, 83 in Denmark and 143 in the United States. We want to examine this situation and find out where the remedy lies; whether the manufacturers are to blame for the failure to turn out the right kind of materials, or whether it is not that the British public, broadly speaking, has failed to visualise the telephone as one of the essential services of modern life. It seems to us desirable that, whatever the underlying cause may be, the industry as a whole should do everything possible to remove this distinct handicap upon our national efficiency. So we shall endeavour to make the telephone occupy its rightful place both as an ally to business and as a genuine, indeed indispensable, social and domestic service. How shall we do this? We shall try, by means of newspaper advertising and other methods, to throw a searchlight upon the many uses and amenities which the telephone and its auxiliary services yield, so that all may see and appreciate them at a fuller value. By popularising, and thus hastening, the development of the telephone we shall be working frankly in our own interests as manufacturers, but everyone will admit that this more rapid development will make for the general good of the community, since trade and industry, social life and domestic economy will benefit in like proportion. Moreover, our efforts will help to create employment in at least three distinct directions, *i.e.*, in the manufacture, in the maintenance and in the administration of more telephones throughout the country. All these considerations give us, to our thinking, an ample warranty for our work and provide also a national incentive to persistent effort to cultivate the enormous field for telephone development now lying fallow in this densely populated country. Our general aim should be to make the telephone as much part of every office, home and street as is the main water supply." The offices of the Association are at Aldine House, 10 Bedford Street, Strand, and as soon as the Association is registered, the Secretary, Mr. H. E. Powell-Jones, will be glad to deal with enquiries.

"Strawberry Hill Gothic."

By Katherine Esdaile.

The pioneer's is always an ungrateful task. The phrase at the head of our article has passed into a proverb for the tasteless imitations of Gothic art which filled the land from 1780 to 1840; and Horace Walpole has been held responsible for structures which he would have been the first to condemn. But, whatever his practice, Walpole's principles were sound. He feared, as he says in his preface to the Strawberry Hill Catalogue, that "the general disuse of Gothic architecture, and the decay and alterations so frequently made in churches, give prints a chance of being the sole preservative of that style," and he conceived the happy idea of "exhibiting specimens of Gothic architecture, as collected from standards in cathedrals and chapel (chantry) tombs, and shewing how they may be applied to chimney-pieces, ceilings, windows, balustrades, loggias, etc." But he was too wise to be archæological at the expense of comfort. He defends the combination of "obsolete architecture" and modern improvements and connoisseurship on the ground that he "did not mean to make his house so Gothic as to exclude convenience and modern refinements in luxury"; and justly asks whether our ancestors would not have placed statues and pictures, vases and ornamental china in their gloomy castles, if only they had had them.

The contents of that "small, capricious house, built to please my own taste, and in some degree to realise my own visions," are world-famous; it is with the architecture and fittings that we are concerned to-day. The hall was hung with a Gothic paper taken "from the screen of Prince Arthur's tomb in the cathedral of Worcester"; the little parlour had "a chimney [piece] taken from the tomb of Thomas Ruthall, Bishop of Durham, in Westminster Abbey," which also provided a model for the chimney-piece in the great North Bedchamber. On the staircase was an original head of Henry III "carved in alto-relievo on oak, from the Church of Bamwell, near Oundle, in Northamptonshire, which he endowed." The books were arranged "within Gothic arches of pierced work, taken from a side-door case to the choir in Dugdale's St. Paul's"; the chimney-piece from the tomb of John of Eltham in the Abbey; its stone-work from that of Thomas, Duke of Clarence, at Canterbury; the Star Chamber contained Torregiano's original stone model for Henry VII's portrait on his tomb; the chimney-piece of the Holbein Chamber was "chiefly taken from the tomb of Archbishop Warham at Canterbury"; the pierced arches of the screen "from the gates of the Choir at Rouen"; the ceiling of the Gallery "from one of the side aisles of Henry VIIth's Chapel"; the three doors "from the north door of St. Alban's"; the chimney-piece of the Round Drawing-room "from the tomb of Edward the Confessor, improved by Mr. Adam," with very quaint results, by the way, and "the surbase of the window" from that of Queen Eleanor. In the Tribune, the Chapter-house at York supplied the room; the tomb of two children of Edward III in the Abbey, its "altar of black and gold." Even the piers of the garden gates were "taken from the tomb of William de Luda, Bishop of Ely, in that Cathedral," and in the Chapel antiquity, as was natural, prevailed almost entirely. The "beautiful front of Portland stone" applied to the brick building "in the south-west corner of the wood," was taken from the tomb of Edmund Audley, Bishop of Salisbury. The Chapel contained among other treasures, the four panels from the Abbey of St. Edmundsbury, representing Cardinal Beaufort, Archbishops Kemp, Humphrey, Duke of Gloucester and the donor (?); the famous shrine of Pietro Cavallini, from Santa Maria Maggiore, stood inside; the window was that famous one brought from Bexhill, with portraits of Henry III and Queen Eleanor, which is one of the most important examples of stained glass of the period.

This is surely a remarkable record of practical interest in the architecture of the past. Horace Walpole's fear that Gothic art would disappear altogether from the memory of man may seem grotesquely exaggerated to-day, but there was a very real danger of it not so much in 1774, when the Strawberry Hill Catalogue appeared, but in the preceding twenty years, when Walpole was making his house and his collections. His tussle with the Dean and Chapter of Westminster over the proposed removal of the monument of Aymer de Valence to make room for Wilton's cenotaph to Wolfe is only an example of the sort of thing that was likely to be carried to still greater lengths outside the capital. Wilton wanted the monument out of the way; Walpole heard of this and wrote a letter of protest to the Dean; and the Dean wrote back at the end of a fortnight, saying that they had taken the tomb for a Templar's, and Templars were "a very wicked set of people." But the monument was saved, and not set up at Strawberry Hill, which might have been its fate had it been removed; though when the Dean discovered whose tomb it was, he "engaged Wilton to set it up within ten feet of where it stands at present." The whole story is a singular illustration of the callousness of the age towards its earlier inheritance, and Walpole might well think that there was some merit, as well as a good deal of pleasure, in indulging his own taste for Gothic. It was his misfortune rather than his fault that his own attempts at Gothic, drawn by his friends indeed, but supervised by himself, were arrant failures, compounded of different periods and often of no period at all; but that he made a serious attempt to preserve some of the more interesting features of our tombs and churches, as well as such disregarded monuments of antiquity as the Bexhill window and the St. Maria Maggiore Shrine is beyond question. He lived to see his own taste spread through England; to watch Gothic houses, large and small, spring up like mushrooms; to hear of the restoration of the very buildings whose disappearance he dreaded.

It has been given to few men to create two such monuments as the Gothic Revival and the historical romance, and if some degree of the absurd attaches alike to Strawberry Hill and the *Castle of Otranto*, the credit of the pioneer should not be lessened by the triumphs of his successors. Of one thing we may be sure; the man who collected so many works on architecture in his own library would have been the first to rejoice in the popularity of the past to-day; and of that popularity he laid the foundation in the supposedly Philistine reign of George II.

"The Architect" Fifty Years Ago.

October 10, 1874.

The Midland Railway Depot.

On the site of the old Whitecross Street Prison, and at a cost of £130,000, the Midland Railway Company are about to erect an extensive goods station and range of warehouses, forming the City goods depot. The warehouses, built of red brick, with Portland stone dressings, will, when completed, be amongst the loftiest buildings in the City, the total height being 80 feet, six storeys of which will be above the railway level. The junction with the Metropolitan line is on the south side, between the Aldersgate Street and Moorgate Street Stations, and the warehouses, which will be on the east side, will have a frontage to Whitecross Street extending the whole length of the land, and cover an area of 2,000 square yards. The rest of the land, between Redcross Street and the rear of the depot, will be covered with sidings communicating with the Metropolitan main line. The main entrance will be from Whitecross Street, whilst other means of ingress will be provided, communicating with the railway on the low level, in the rear of the warehouses.

Trade Notes.

The offices of the British Pipeless Central Heating Co., Ltd., are at 57-61 Pershore Street, Birmingham.

Three more posters of the "R.A. Series" have been produced by the London Midland and Scottish Railway, and will be exhibited at the principal stations on the system during the present week. These are "Warwick Castle" by Mr. Adrian Stokes, R.A., "Conway" by Sir David Murray, R.A., and "Coal" by Mr. G. Clausen, R.A., a further addition to the posters representing British Industries.

Messrs. Bells United Asbestos Co., Ltd., announce an interim dividend of 6d. per share on the ordinary shares, being 2½ per cent. less income tax. The dividend will be paid on October 20 to shareholders on the register on October 6.

Bribery.

We have before us a lurid pamphlet with the word "Bribery" written across its cover in big black letters, which we find to be the news sheet of the Bribery and Secret Commissions League. We learn that the minimum annual subscription to the League is two guineas for a firm and one guinea for a person. This being paid, the subscriber will feel he is enlisted as a vigilant and will have reason to be proud of the fact that the number of convictions under the Act was 27 last year. We learn that the Attorney-General has refused his fiat for the League to prosecute in a case in which counsel considered proceedings should be taken but in which a betrayal of trade secrets was involved. In respect to building, we learn that "Balbus," writing to the "News Sheet" as follows:—

I have read with considerable interest Mr. Harold Cox's letter upon this subject, and I sincerely hope that it may lead to a keen public interest in the matter. There is one trade in particular (not mentioned by Mr. Cox) in which bribery has been playing a very conspicuous part since the war. I refer to the building trade. The cost of building at the present time is appreciably increased by the secret commissions paid to persons who are in a position to influence the placing of contracts. Before the war, when the provision of houses was left mainly to the enterprise of speculative builders, bribery in the house-building trade was unknown, for the simple reason that there was no one to bribe. But after the war, when municipalities entered upon big building schemes, corruption at once became rife, and every builder and builder's merchant seeking to secure business has become accustomed to hearing the familiar question: "And what do I get out of this?"

In addition to affecting the cost of building, bribery also affects the question of what materials are used. During the recent shortage of bricks there were many advocates of the use of concrete blocks. But manufacturers found there was a very strong prejudice against concrete, which could only be overcome by substantial bribery, exceeding the bribery of the persons dealing in other materials. There is, I know, the additional obstacle that union bricklayers refuse to lay concrete blocks, but this obstacle could be overcome by employing unskilled labour. The real barrier is the gentleman who draws a commission from the supplier of materials and tells him very frankly that if he likes to charge every now and again for two or three thousand bricks which have not been supplied, no questions will be raised.

Now we have no doubt that there is a good deal of more or less dishonest dealing to be discovered to-day, both less than there used to be and more than there should be, but we rather doubt whether an organisation of this kind can do a great deal of good. From time to time some dishonest person gets caught and often enough others escape, but we a little question whether it is worth the average man's while to become a vigilant in dealing with these matters.

Leicester Building Exhibition.

This exhibition, which is being held in the Junior Training Hall, Leicester, opens on Thursday next, October 16, and will be open daily from 11 a.m. and to 9.30 p.m. His worship, the Mayor, will open the exhibition in company with many prominent citizens and members of parliament.

A number of important exhibits will be found dealing particularly with the housing question. Messrs. Henry Boot & Sons (London), Ltd., builders and contractors, will show a wood model of a pair of concrete houses, being an exact copy of those now in construction at Birmingham, where 1,000 of these houses are being erected at the rate of 14 per week. Messrs. The Triangular Construction Co., Ltd., of Imber Court, East Molesey, Surrey, are showing their triangular blocks and their "Trianco" roofing tile machine and wall and slab making machines. The Triangular block is being extensively used for housing schemes. Messrs. Langley, London, and The Courtrai Du Nord Tile Co., Ltd., may be depended on to make an exhibit both pleasing and instructive, and their stands will no doubt be well patronised. We shall refer to these exhibits and others of interest in next week's issue. "The Architect" stand will be No. 30, Row B.

The following election has been made at University College, London:—To the Bartlett Entrance Exhibition, tenable in the School of Architecture, of the value of £40 a year for five years, Mr. W. F. B. Lovett of the Dunstable Grammar School.

The Art Galleries of Bond Street and the West End.

Who are the persons connected with our picture galleries in this fashionable quarter? What has been their training? That these exhibitions are held for a purely business end we have no doubt. The artists either rent the galleries and conduct the exhibition themselves with their own staffs, or the proprietor of the gallery arranges for an efficient supervision during the exhibition period. Arrangements are made with the gallery owners in many different ways. Sometimes a rent will cover the artist's obligations, sometimes the exhibition is arranged on a sale commission basis, at other times rent and commission on sales forms the basis of the agreement between the gallery owner and the artists. We would always recommend to the artist that the interest of the gallery owner being maintained by an interest in the sales, most of these proprietors and their staff have a very great knowledge and are first class salesmen. More often than not it is a pleasure of great fascination to tactfully watch the many different methods they employ in connection with bringing to a successful termination the enquiry of a purchasing visitor. The tact which they use when accompanying some artistic authority round their exhibitions is illustrative of the many years of close study they have devoted to their varied work.

They deal politely with the learned, unlearned, with the bounder and conceited. It does not need a very great imagination to picture how weary these men and women, many of whom possess a very real knowledge, sometimes must be of the terrible bores that visit the galleries. The public that visit these exhibitions are also worthy of some mental thought and consideration. In most cases an entrance fee is charged which some might be inclined to think would lessen the number who might pass the turnstiles, but this fee in truth makes very little difference. Those who are truly interested in art have no objection to it and those who are not interested do not visit these art exhibitions under any circumstances. Those who attend have sufficient appreciation to desire to contemplate the pictures in undisturbed quiet. It is this knowledge of the public attitude that makes the successful salesman's work so very difficult, he must study his visitors very carefully and only approach them when he fully realises that they would like to have his attendance. The art of selling pictures is not easy, further, no successful or finished salesman sells a picture with the idea that his client is only casually interested in Art. The talented individual will so handle the client that when he leaves the gallery will wish to return again on many other occasions.

When selling is attempted by the amateur the client frequently purchases a picture in desperation, with sole idea of making a graceful exit, but registering a mental vow never to visit the gallery again. Artists would be well advised not to attempt to sell their own works and not to overdo their attendance at the gallery during their own exhibitions. Gallery proprietors have made many reputations for different artists by their tact and ability, and newcomers should never forget that whilst they may be the creators of fine pictures the successful handling of the Press and public also needs considerable talent.

SLEAFORD.—The Urban District Council are inviting Mr. W. H. Maxey to act as architect for the first instalment of the Drove Lane housing scheme.

UPTON.—West Riding Education Committee are to purchase a site at a cost of £924 for a new school to accommodate 1,000 children.

WALTHAMSTOW.—Revised plans have now been prepared by the Essex county architect for a secondary school for boys, with accommodation for 460 and estimated to cost £48,500.

WAKEFIELD.—West Riding County Council propose to erect a building at the corner of Wood Street and Bond Terrace for the medical officer's staff at a cost of £23,500, a garage at Cliffe Parade at a cost of £4,500, and a building for the stores department at the depot at a cost of £30,000.

PRESTWICH.—New stores for the Prestwich Co-operative Society are to be erected in Bury New Road.—The transformer sub-station in Rectory Street is to be enlarged by the Salford Corporation.—Subsidy house plans passed: 6 houses, Russell Street, for Mr. W. M'Gough; 12 houses, Polofield Road, for County Construction Co., of Radcliffe.

TORQUAY.—Tenders are being invited by the Devon County Council for the erection of nurses' quarters at Whitecliffe. It is proposed to refit the laundry and carry out repairs thereto.

WIMBLEDON.—Plans passed: 2 houses, Devas Road, for Messrs. H. Coombs & Sons; 4 houses, Albany Road, for Mr. Browne.

Painting Materials and Their Application.

By E. Clay Inston.

In this article I do not propose to deal with the æsthetic side of decorative work, but (which is equally important) with the practical side. It may be well to mention here, however, that in considering a colour scheme due attention should be paid to colours that will remain durable and will not react upon the other ingredients in the paint.

Let me say that in writing these notes I am not actuated by any propagandist motive—nor do I hold a brief for any manufacturer or contractor, but simply because I have been so frequently appalled at the work and materials usually presented to the trusting architect (and all too often to his equally trusting clerk of works) and in the hope that my words may be of some assistance.

Many very fine schemes of decoration are ruined by poor workmanship and materials, and my experience shows that the architect has almost invariably left the practical side of the job in the hands of the decorator. This is, of course, very much as it should be, if a firm of high repute is employed, but, on the other hand, there are many firms, unfortunately, who fail to give satisfaction, and although their work is apparently quite good for a little while after completion, it rapidly deteriorates.

The object of this article, therefore, is to assist the architect with a few practical hints which will enable him to checkmate the careless or poor workman.

Among architects and surveyors too little importance is attached to painting and decorating, and I have found that where a little more attention has been paid by the architect to the execution of the work and a little practical criticism passed, the resulting improvement has been enormous.

A few words about materials are perhaps necessary before proceeding to deal with the actual execution.

PAINT.—There is no doubt that the developments in the preparation of paints ready for use have resulted in the market being well stocked with ready-mixed paints of all grades, from the finest enamels down to very poor stuff hardly fit for dog kennels, and the architect about to embark upon any scheme including decorative work would be well advised to consult one or two of the better firms of paint manufacturers, some of whom (but not all) have representatives who are not merely salesmen, but undergo a course of training in paint manufacture and application before going " on the road " and are therefore quite competent to advise as to the material most suitable for the job. Many firms now run an architectural service department in this connection, and not only advise before work is specified but actually assist in supervision during progress, thus, incidentally, ensuring that their firm's paint is not interfered with by the contractor or workmen.

Research work is now being carried out by the National Physical Laboratory in connection with building materials generally, but up to the present the results as regards painting materials are negligible.

The better firms of paint manufacturers, however, maintain staffs of research chemists as apart from the *Works* chemists, and I would strongly advise architects and surveyors to make every use of the assistance which in most cases is willingly and freely given by such firms, and to be guided thereby.

Many advertisements call attention to ready mixed paints " made of genuine white lead," but they say nothing of the remaining ingredients, which are equally important.

How many users of painting materials look upon them as seriously as they would upon the materials used in concrete ? Yet in considering the two there are many similarities. Concrete consists of an aggregate (ballast or broken stone, etc.), a filler (sand, etc.) and a matrix (cement or lias lime). Paint also consists of aggregate (white lead, zinc oxide, or Lithopone), a filler (barytes, and very often chalk in bad cases) and matrix (boiled linseed or Tung oil and turpentine). All these ingredients have a part to play, and the importance of this must be realised before any criticism of practical work can be of value. As mentioned above, prominence is generally given to white lead, but white lead alone would be useless as a protective coat, as also would the filler (or adulterant, as it often happens to be in paint). On the other hand, boiled linseed oil is of itself an excellent preservative, and when of proper quality may be used alone. Turps, of course, is almost useless from this point of view.

Without going into the physical or chemical properties of these materials it will be realised that their functions are briefly :—

Aggregate.—Whether of white lead, zinc oxide or Lithopone, serves to give " body " to the paint, and when of the requisite quality its chemical reaction on the remaining ingredients is reduced to the minimum.

Filler.—This so far as paint is concerned is an adulterant, but within reasonable limits is quite permissible, and the manufacturer who really values his reputation rarely exceeds the safe limit.

Matrix.—Linseed oil or Tung oil. These serve the same purpose as cement in concrete, and bind together the remaining constituents. The oils are, of course, prepared before mixing and contain the correct proportion of gums and driers.

Turpentine is used as a thinner and is added in varying proportions according to the colour and degree of gloss required in the finished work.

All these materials have their substitutes (I shall probably be taken to task for mentioning Lithopone as a *base*, but some of the finest undercoatings (and finishings) manufactured to-day contain this material almost exclusively—whereas the uninitiated look upon it as " taboo "). White lead and zinc oxide are adulterated with barytes, chalk, fine white sand (silica), lead sulphide, etc. Linseed oil and Tung oil have their exponents, each has its merits and particular limits, but each may be substituted or adulterated with such materials as cottonseed oil, Soya oil, fish (Menhaden) oil, etc., none of which can be regarded as giving anything approaching the results obtainable by the genuine article.

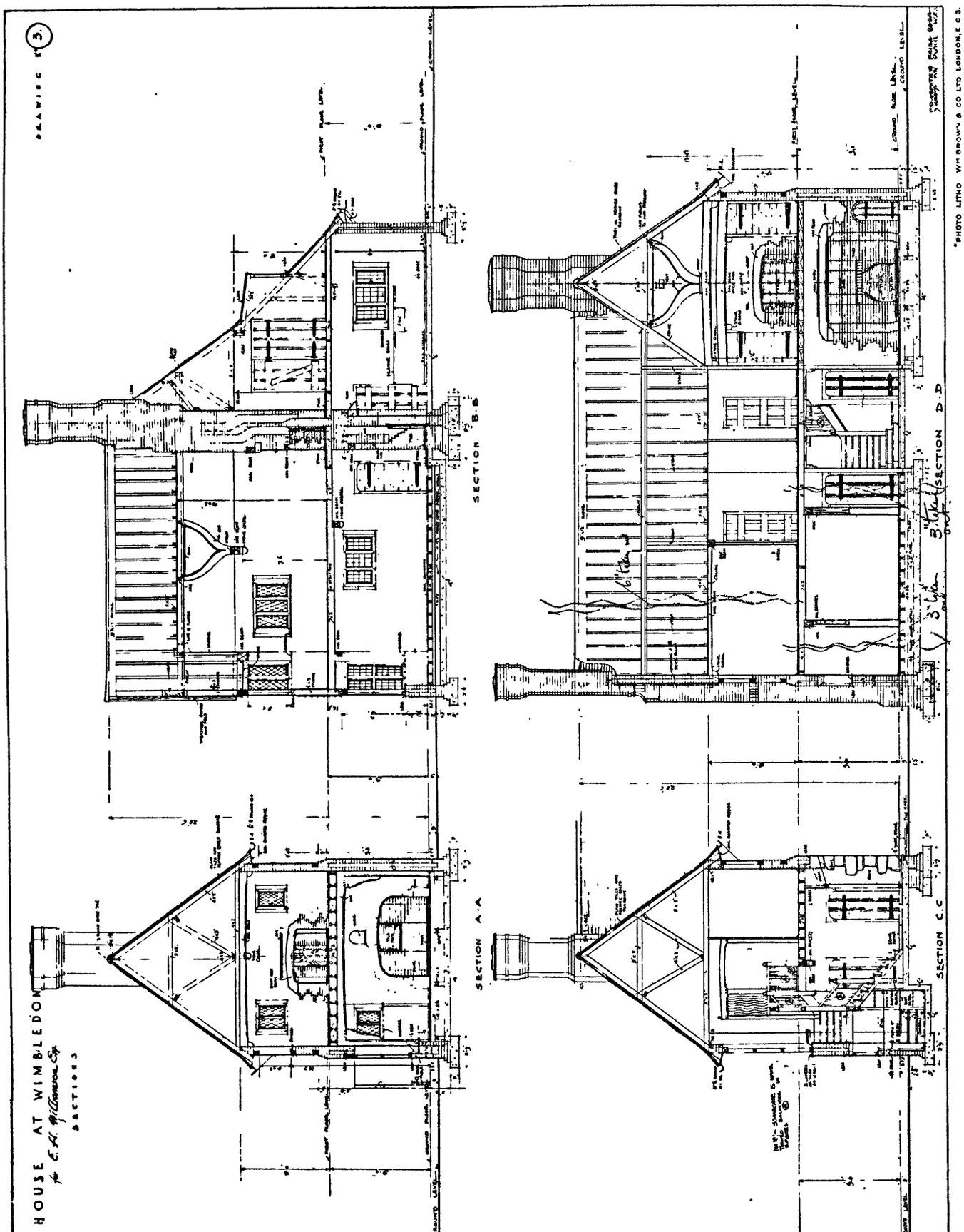
Turpentine is adulterated most frequently with " white spirits " which is to all intents petrol or shale paraffin. Its presence can be easily detected by shaking the vessel containing the turps, when, if white spirits is present, a decided froth will be apparent. Coal-tar naphtha is also used as a substitute or adulterant.

For general purposes a paint containing, but not based entirely upon, genuine white lead will be found satisfactory for outside work. The proportions of white lead and zinc oxide vary with the colours, but for general work equal proportions of these two ingredients give good results.

For indoor work the white lead is often omitted and the bulk of the base is then either zinc oxide or Lithopone. Lithopone, however, has certain disadvantages and should not be used as an " extender " for white lead or zinc white. It sometimes creeps in during process of grinding, etc., but should be limited to a maximum of 5 per cent. of the total content. Above that proportion it will cause many faults—notably " photographing " or deepening of colour where partly protected from light. As an exclusive base for undercoating and for *white* finishings it is almost unsurpassed for internal work.

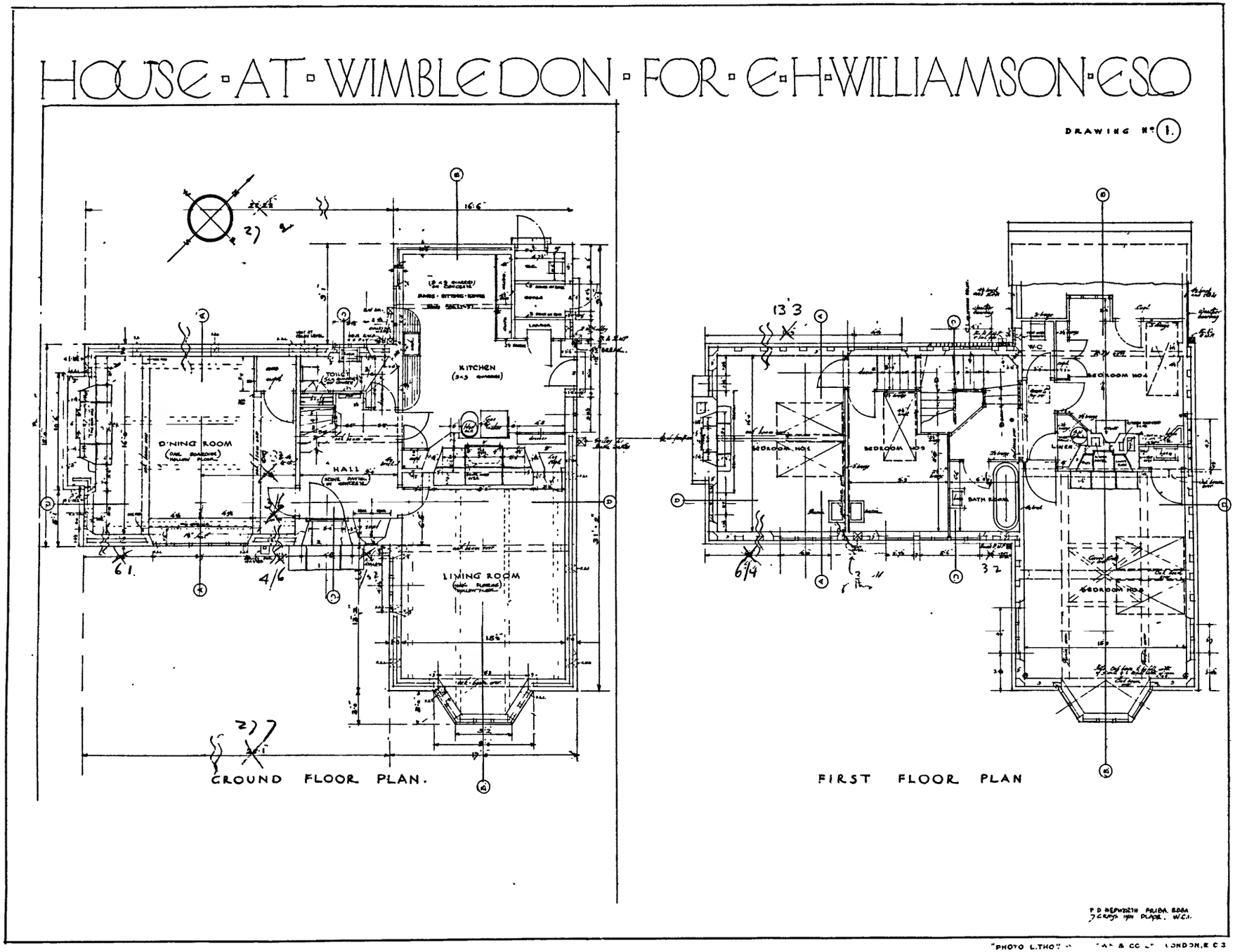
A final word as to ready mixed paints. For preference specify the paints of a firm which refines its own oils and varnishes—you may then rely upon their goods. Many of these firms supply others with the necessary oils and mixing varnishes, but it is only reasonable to expect them to retain the best for their own paints and enamels.

DISTEMPERS.—Most manufacturers of oil paints also make their own washable distempers. Nearly all have good points, some are worse than useless and many have their useful limits. Quite half of the proprietary distempers on the market at present work " fiercely," that is, they commence to dry too quickly on absorbent surfaces, resulting in gathering on the edges where work is picked up, unless the



HOUSE AT WIMBLEDON—SECTIONS.

P. D. HEPWORTH, ARCHITECT.



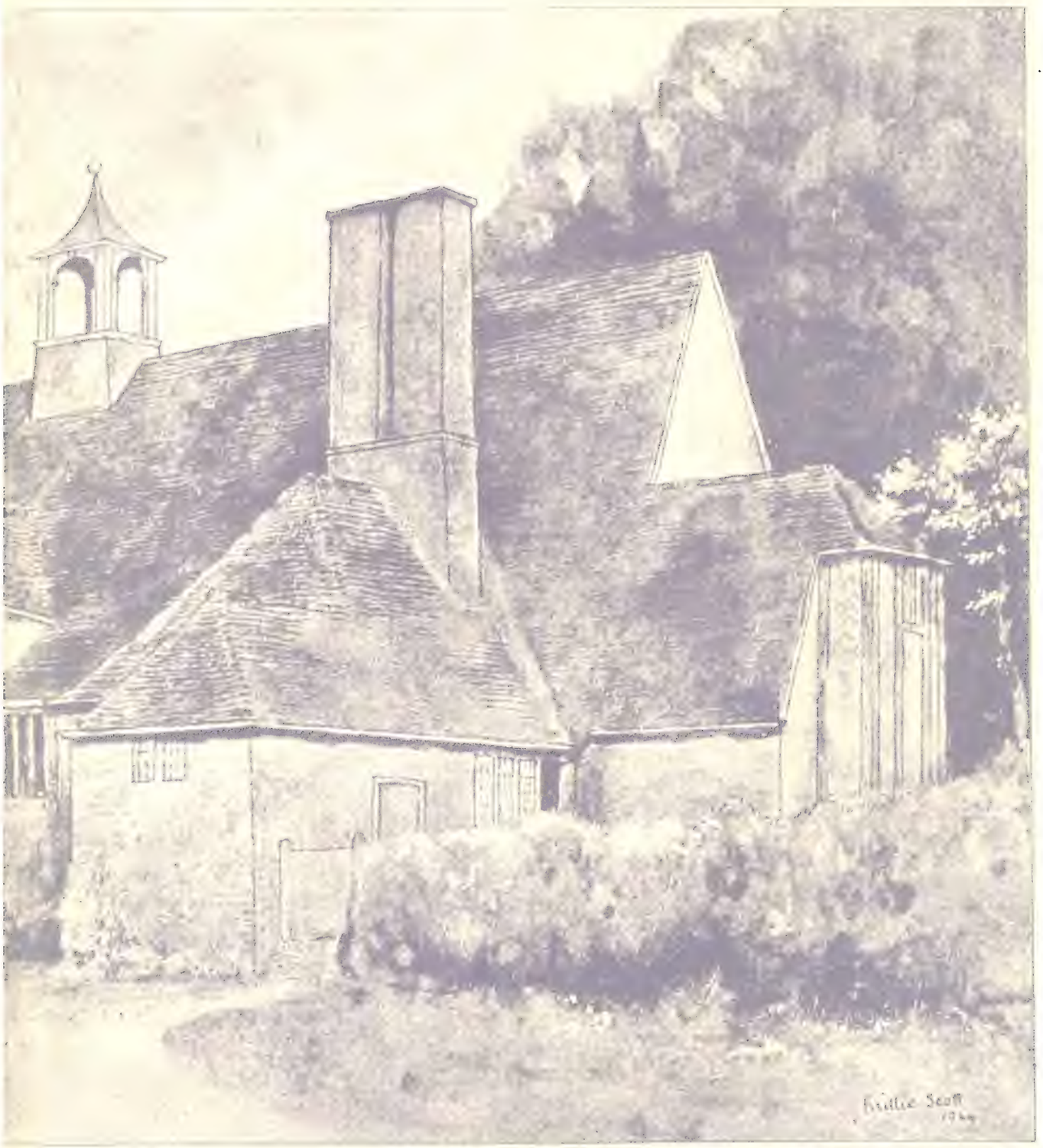
HOUSE AT WIMBLEDON—PLANS.

P. D. HEPWORTH, ARCHITECT.

R.A. 1924.

WOMEN'S INSTITUTE

BAILLIE SCOTT & BE



"INK-PHOTO" Wm BROWN & CO LTD LONDON, E C 3

MILFORD, SURREY.

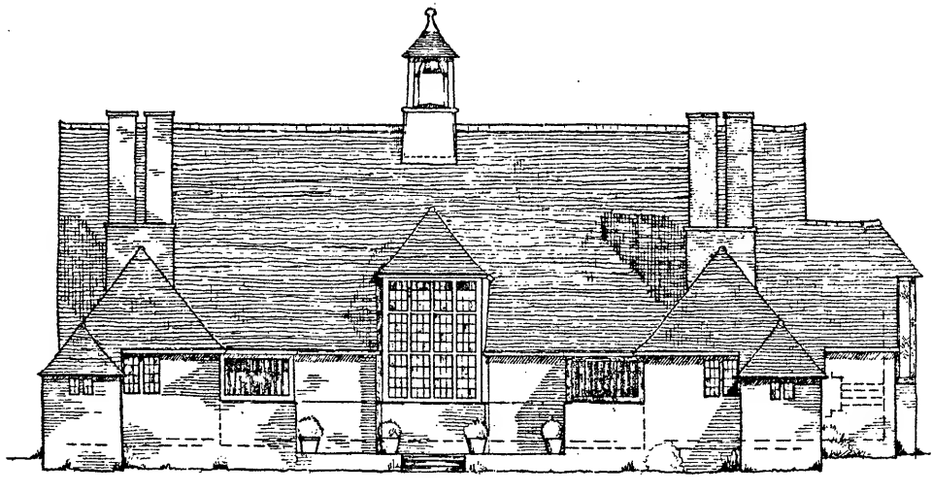
.FORD, ARCHITECTS.

HIS EXCELLENCY THE GOVER
HERBERT BAKER

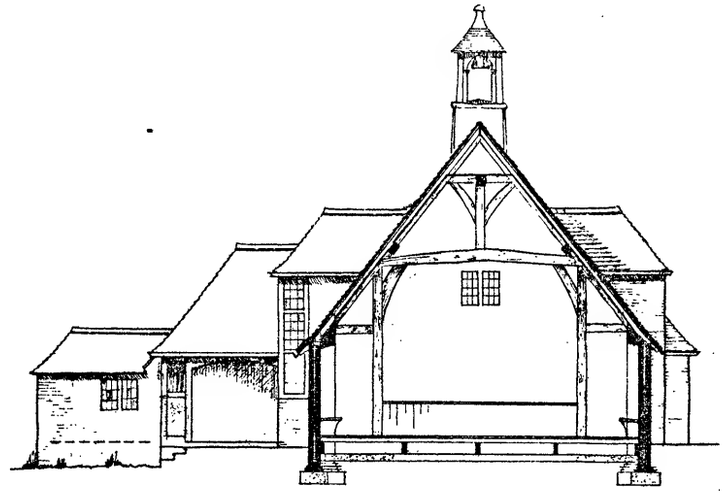
"INK-PHOTO" WM. BROWN & CO. LTD. LONDON, E.C.3

NOR'S RESIDENCE, PRETORIA.

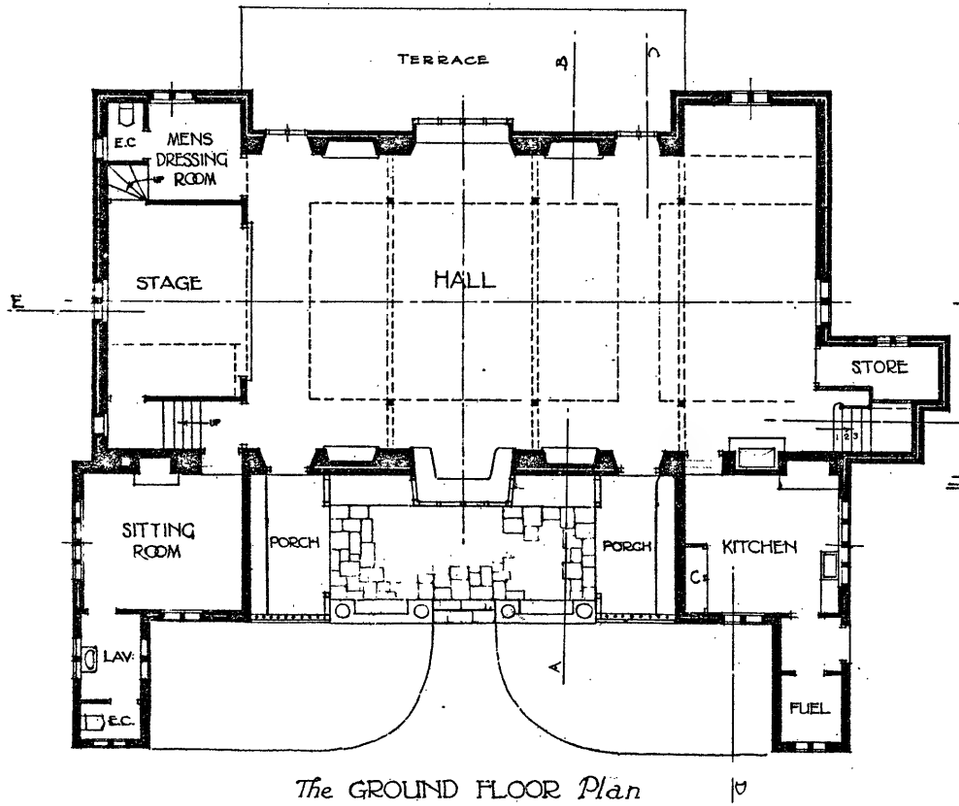
A.R.A., ARCHITECT.



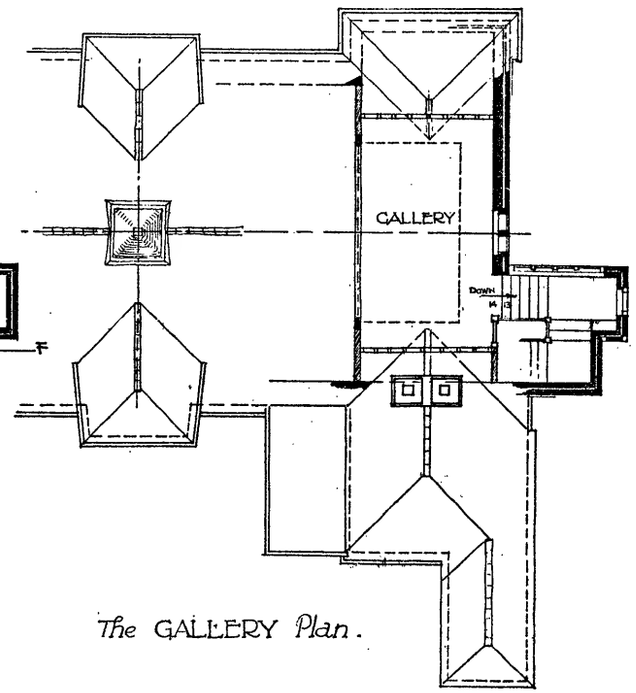
The NORTH Elevation.



The SECTION on line A-B.



The GROUND FLOOR Plan

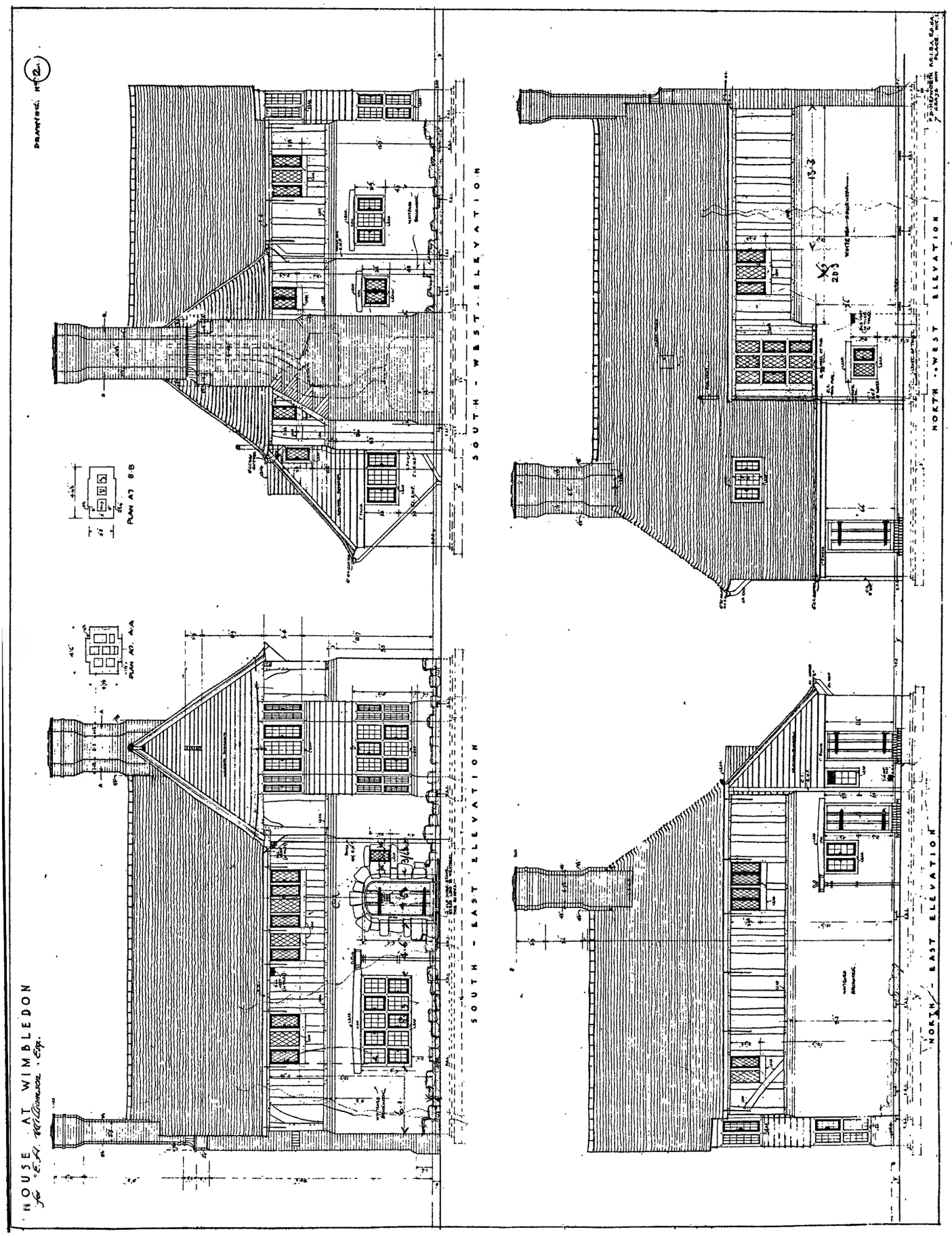


The GALLERY Plan.

"PHOTO-LITHO" WM BROWN & CO. LTD LONDON, E.C.3.

WOMEN'S INSTITUTE AT MILFORD, SURREY.

BAILLIE SCOTT & BERESFORD, ARCHITECTS.


HOUSE AT WIMBLEDON
SOUTH - EAST ELEVATION
SOUTH - WEST ELEVATION
NORTH - EAST ELEVATION
NORTH - WEST ELEVATION
PLAN AT A-A
PLAN AT B-B
"PHOTO-LITHO" WM BROWN & CO LTD. LONDON. E.C.3.

HOUSE AT WIMBLEDON—ELEVATIONS.

P. D. HEPWORTH, ARCHITECT.

painter is well used to the material and is skilful at his job. The average distemper, contrary to popular thought, requires as much skill in application as an oil paint.

As to content, they are mostly based upon chalk (carbonate of lime) and barium sulphate, with the necessary colouring matter. The vehicle used and incorporated when the distemper is ground to a paste is in most cases water, to which has been added glue, sodium phosphate, casein, soda ash, etc. (varying with different makes), and sometimes they contain a preservative such as phenol, thymol or alum. Some of the better distempers also contain linseed oil in colloid form. Generally speaking, the addition of sufficient water to reduce the paste to a " cream " is all that is necessary to make them ready for use.

I should like to go much more deeply into the composition and manufacture of painting materials, but the subject is a very wide one—far too elaborate to be discussed in the limited scope of this article, and having dealt all too briefly with the point I must now turn to the equally important one of workmanship.

Perhaps the most important point of workmanship is in the " preparation labours." All too frequently we see the work specified " Prepare and paint " so many coats, the definition of the word " prepare " in this instance being left to the goodwill of the contractor. Very often even " knot, stop and prime " is not included in the clause relating to new joinery, etc.

I propose, therefore, to define the various labours as briefly as possible both for new and old work.

NEW JOINERY.—In good class work this should not be accepted finished as from machine, as all defects in surface are magnified by the subsequent painting. It is recommended that joinery be specified to be " scraped " ready for painting, polishing or varnishing as may be. Of course, a good joinery firm will often do this for reputation sake, but it is safer to specify the requirement.

Assuming then that the new joinery surface is satisfactory, the architect should specify " knot, stop and prime before fixing the joinery, etc."

This means that, firstly, the knots should be properly covered with preferably two coats of a good prepared knotting or shellac varnish.

STOPPING consists of filling all cracks and depressions with a suitable material. This needs careful watching. 99 per cent. of contractors will use common putty. Now, as putty requires some days to set, and seldom *hardens* it stands to reason that it is not suitable for this job. The best material is white lead or zinc white ground in japanners' gold size, and this should be specified and used. The average painter dislikes using it because it sets quickly and very hard, and, during use, must be kept in a small receptacle covered with water.

PRIMING.—Unless specified to be obtained from the manufacturer whose paint is to be used, the contractor will use material from the " smudge tub." That is, the first coat in such circumstances will be a compound of all the skins, waste paint, oil, turps, substitutes, etc., mixed up to a workable (and generally thin) consistency without any regard to correct proportion or balance of the constituents. The skins are, of course, paint in which the oil has already oxidised and no amount of grinding or mixing will render them fit for reuse.

Therefore specify that the priming and all under and finishing coats are to be obtained from Messrs. . . . in sealed cans or drums *and used as received from them.*

NEW WALLS.—These are best left unpainted, no matter what patent plaster has been used. They may, however, be distempered with a good washable distemper and painted upon this after 12 months has elapsed. If, however, the walls *must* be painted and the architect feels inclined to risk the almost inevitable failure, then the new plaster should receive one coat of good " sharp " paint. Again go to the manufacturer of the rest of the paint used on the job and tell him what is required.

NEW IRONWORK.—This is, of course, ideally prepared for painting if specified to be " dipped in linseed oil whilst hot after being worked." If this is not done then specify " thoroughly scale with wire brushes, remove all rust and grease, and prime with one coat (or two coats externally) of special *iron* priming paint to be obtained from Messrs. . . ."

The whole of the scale and rust should be removed, otherwise the paint will in a short time pull this off and lay bare the ironwork.

Having thus briefly dealt with the preparation of new surfaces, I will deal with the question of rendering existing painted and decorated work fit for repainting.

WOODWORK.—This will in use have become dirty, collected grease, developed shakes or open joints in the joinery, become dented from blows, and have paint worn off in places by abrasion.

Specify " Thoroughly wash, using pumice stone, with a weak solution of Hudson's soap in warm water (soda, sugar soap, soft soap, other dry soap or alkali not to be used), rinse clean removing all dirt, grease, and soap solution. Fill face, bring forward and thoroughly rub down and paint . . . coats finished . . . ."

To explain the foregoing. Hudson's soap is specified because it is the most gentle in use, and if applied in a commonsense manner and thoroughly rinsed off it cannot harm. Soda, sugar soap, soft soap and alkaline compounds, ammonia, etc., are likely to be harmful. The contractor and the painter both like to use them as they save labour, but they are more difficult to neutralise than Hudson's soap, and the smallest trace left upon the surface will develop a defect in time.

FILLING means the filling of cracks, shakes, or open joints. These should first be painted, and while wet they should be filled to within $\frac{1}{8}$ in. of the surface with common putty, the surface being then " faced " with the white lead in japanners' gold size previously mentioned. All these patches of " facing " and places where the wood has been bared should receive an additional coat of paint before proceeding.

OLD WALLS.—Where the plaster is cracked this should be cut out (edges under-cut), and made good in Keene's or Parian cement, *and painted with one coat of primer.* Hair cracks may be suitably filled with thick washable distemper, properly rubbed down when dry *and painted one coat of primer.*

The whole surface should, of course, be washed and pumiced as described for woodwork, but the facing may be done with the paste of a washable distemper, afterwards primed, but the white lead and gold size stopping makes the best job.

OLD IRONWORK should be washed, all scale and rust removed, bare places primed with special iron priming paint before proceeding. Scale should be removed with old files or chipping hammers. Some contractors like to omit the washing, but it is essential and should be specified and insisted upon.

STAINING AND VARNISHING.—Staining by means of liquid stains on either soft or hardwoods gives, in the writer's opinion, a very poor job even when done by the most skilful hand, but many people like the process and there is still a demand for it. There is, however, a new process now available known as " Drytone," and the architect would be well advised to investigate its possibilities before going forward with liquid stains.

In the latter event, however, specify that a sample panel is to be executed for approval before the work proceeds.

Specify " Carefully rub down with fine glass paper and stain with an oil (or water) stain to approved colour, size and twice varnish with Messrs. . . . copal (or other as selected) varnish. Each coat of varnish excepting the final to be felted down." (Scraping makes a better job than glass-papering, but is a little more costly.)

Here again take the advice of the paint and varnish manufacturer, both as to the type of stain and most suitable varnish.

(*To be continued.*)

Book Notes.

A History of Architecture on the Comparative Method. Sir Banister Fletcher. 7th edition. B. T. Batsford, Ltd. £2 2s. net.

This well-known architectural work now runs to over 900 pages of closely printed matter and includes 3,500 illustrations. It fills its special place among the educational books of the profession, that of a condensed summary of architectural facts dealing with the buildings usually considered as outstanding and important from their historical significance. It is primarily a work for the student, and, secondly, a convenient volume of reference for the architect. Naturally, illustrations suffer from the process of condensation, but without such simplification and condensation many would have to be omitted. The work is encyclopædic rather than critical, and in the former category a very successful achievement.

We may mention two small criticisms. Why does the author describe our buildings between the close of Jacobean period and that of William and Mary as being "Anglo-Classic"? We do not remember hearing the description used elsewhere and do not consider it as appropriate as the broad and well-known phrase English Renaissance which covers the whole period which elapsed between the end of the Gothic epoch and that of the various revivals of last century.

And we dissent from the description of Indian, Saracenic and Eastern architecture generally as being Non-Historical simply because it has little bearing or apparent influence on European architecture. We say apparent advisedly, because architectural expression is not rigidly bounded by frontiers, and it is impossible to say that if we made any deduction from the sum of architecture that we should not modify in some way or other what remained. To-day certainly the more we know the more we are influenced, and it is possible that a study of the often magnificent forms of Indian architecture would teach us new and useful lessons.

History can in any case not be defined as European history or art as European art, and so we should have preferred another title to this section of the work, and, did space permit, a fuller description of buildings which are among the wonders of the world.

Obituary Notice.

The late Augustus Spencer, late Principal of the Royal College of Art, South Kensington.

The writer feels that many fellow students of his time and of the years that followed right up to the retirement of Mr. Spencer will deeply regret to learn of his death. The Royal College of Art had passed through some very difficult months just prior to Mr. Spencer's appointment. For quite a considerable period of time no principal was appointed to the post. The late Mr. Morton occupied a temporary position and divided the duties of principal and painting master, which latter he had held for a great number of years. After the departure of the late Sir Walter Crane nobody seemed very anxious to occupy the position, Sir Walter having been, from the student's point of view, an ideal principal. Life at the College during his period was very real and those who came under his personal influence received every help and encouragement. When the students heard that he intended to leave a deputation endeavoured to dissuade him. We all loved and admired him with a deep and sincere affection.

Even when one reflects that the College was without a chief executive for quite a number of months one will readily realise that Mr. Spencer's position must have been very trying during the first year of his occupation of the position. The Students' Union at that time wielded quite a strong influence in the College. Many were the grievances under which the students studied. These students were mostly men and women who were faced with a very vivid consciousness of the problems of life. The mere possession of a scholarship entitling them to a free studentship at the College did not satisfy them under the then existing conditions. The authorities might give them monied scholarships but they could never give them back the years that some had wasted whilst the authorities were considering the system of education and the appointment of a new principal. Mr. Spencer very soon realised the great difficulties that were before him. The authorities appointed professors of painting, sculpture, architecture and design, divided the College into an upper and lower school. Special craftsmen were appointed. The College soon possessed a thoroughly efficient organisation and routine for study. These new ideas naturally did not please the old order of students, including the writer, but Mr. Spencer did everything in his power to make the position of the old student as comfortable as possible during the remaining period of their stay at the College. He was able to visualise their position and feel their discomforts. He set aside his plans as regards these old students, he never attempted to bend them to the new regulations, preferring to see them take their leave with happy thoughts and feelings for the old College. He well realised that very soon the generation at the College would have no recollections of the past and could be moulded and governed according to the new educational ideas and regulations. For these thoughts and considerations the senior students of 1900 will always reflect kindly on the memory of Mr. Spencer. The Leicester Art School will mourn the loss of one of its principals, because prior to filling the important position at the Royal College of Art, Mr. Spencer was principal of the Leicester School of Art.

Beautiful Old Buildings.

Mr. A. Trystan Edwards, in the October issue of "Architecture," when writing on the subject "The City Churches Again," asks, "But who is to determine what are the beautiful buildings?" We should be sorry to see Mr. Edwards appointed as one of the judges. He has of late been at considerable pains to disparage the genius of Norman Shaw that we should be fearful lest his voice might be powerful enough to deprive us of one or many of this great architect's works. We agree with him when he makes the assertion that the attitude of the Press and of men of letters is generally the ultimate determining factor in the popularity and also the longevity of buildings. And it is clear to us that the attitude of these persons is the best; qualified architects themselves are too biassed. We have but little doubt that all the professionals that have contributed to the new Regent Street are in themselves quite proud of their work. We know that the general public is very pleased with the new buildings, and very possibly the clients and property holders are equally satisfied; only those professional architects who have been fortunate enough to secure an opportunity for personal expression are perhaps a little aggrieved, or perhaps even they are indifferent, and the whole disapproval voiced in the Press is due to those who have seen an opportunity in which to write acceptable articles. Because the street is from our point of view rather an architectural failure is not due to profession but rather to the weakness of those who might have exercised a dominating influence in the matter, and thus have secured a street of great architectural beauty such as Nash's original Regent Street for its time and purpose undoubtedly was.

SMETHWICK.—The Board of Education have approved of the proposals for secondary school accommodation in the town to the extent of an ultimate provision of 300 places for boys and 300 places for girls. It is suggested that the accommodation should be so planned that the whole building should not be provided at once, and that the initial buildings should be so designed as to lend themselves to extensions.—The provision of an open-air swimming bath in West Smethwick Park is advocated as a relief work.—It has been decided to obtain the services of an architect to deal with housing matters. Plans passed: 7 houses, Devonshire Road, for Mr. G. Sorrill; rebuilding Cape of Good Hope Hotel, Cape Hill, for Messrs. Mitchells & Bullers, Ltd.; alterations, Bear Hotel, Bearwood Road, for Holt Brewery Co.; extension to works, Hume Street, for Messrs. Scribbans, extension to works, Bridge Street, for Messrs. Phillips & Co.; extension to paint stores, Brook Street, for Messrs. Avery & Co., Ltd.

SOUTH SHIELDS.—The Borough Surveyor has been instructed to proceed with the layout of the site at Sunderland Road for the erection of about 480 houses. He has also been asked to prepare plans for roads, etc., estimated to cost £44,653.—Plans passed: estate plan, for 42 houses, Harton Villa, for Messrs. Davidson, Son & Sherwood; 2 shops, Prince Edward Road, for Mr. F. W. Newby; block of premises with five shops and two dwelling houses, West Avenue, for Mr. R. Brown; shops and houses, Prince Edward Road, for Mrs. J. H. Wilsin; alterations, Golden Lion Hotel, King Street, for Messrs. T. A. Page & Sons.—Revised plans are to be prepared for the provision of an open air school.—Conferences are taking place regarding the extension of the Cleadon Park Sanatorium.—A further expenditure of £12,500 is proposed for the South Beach improvements.—The extension of Dean's Hospital is under consideration.—Schemes are under consideration for developing the North Foreshore, work involving an expenditure of £18,500.—The layout of Bent's Recreation Ground is proposed at a cost of £27,600.

No. 7

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October, 1924

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Building Progress.

Messrs. Kirk & Kirk are erecting new premises in Francis Street, Westminster, apparently for the purpose of a one-storey extension to the National Provincial Bank premises in Victoria Street.

Some new buildings are being erected at Wellington Barracks, for which the steel reinforcement is being supplied by Johnson's Reinforced Concrete Engineering Co., Ltd.

Regarding No. 112 Strand (about which we had an entry in our issue of September 26), it might be added that the asphalte is being put in by the Ragusa Asphalte Co., Ltd. At Nos. 110 and 111, adjoining, Waygood-Otis lifts are being installed; the bricks are being supplied by the Locking Brick Co., Ltd. Greenham, Ltd., are doing the demolition and excavation at Nos. 105–109, adjoining, where the steelwork is being supplied by Messrs. Dorman, Long & Co., Ltd. We had a reference to this extensive rebuilding scheme in our issue of August 29.

In the neighbourhood of Victoria Station there is just now considerable building activity. At No. 18 Hobart Place Mr. A. Bayes is about to effect alterations and decorations. No. 36 Grosvenor Place is undergoing alterations at the hands of the Thames Building Company. The Express Lift Company is supplying the lifts. No. 35, the *vis-a-vis* to the last mentioned premises, and situated at the southern junction with Wilton Street, is also in the hands of the builders, and is undergoing transformation into self-contained flats; Messrs. J. & C. Bowyer are the contractors. We noticed that the Express Lift Co., Ltd., are supplying the requisite lift accommodation and Messrs. Johnson & Wright, Ltd., are responsible for the central heating.

Messrs. Prestige & Co., Ltd., are carrying out the extension to the Outpatients' Department at St. George's Hospital; this is a basement extension only, there being, however, a stone gateway erected, which is approached from Knightsbridge. The various skylights in this new building have wired glass panels.

In Knightsbridge, Messrs. Sims & Sims are about to carry out alterations at No. 47. At No. 20, Messrs. Arthur Vigor, Ltd., are making an artistic alteration (apparently for their business premises) to the ground floor façade, by the insertion of a new front, consisting of inset bow windows and a range of fanlights of pleasing design.

No. 2 Sloane Terrace is having alterations put in hand by R. F. Jobson & Co.; whilst William C. Thomerson is engaged upon alterations and redecorations to No. 147a Sloane Street, adjoining that fine design of John Sedding's, Holy Trinity Church, Chelsea. The Brilliant Sign Co., Ltd., is affixing its patent lettering to the show front.

Further to our few remarks in our issue of July 25th last respecting Vigo House (by the Quadrant in Regent Street), we can add the following particulars:—Messrs. The United Stone Firms, Ltd., are supplying the Portland stone for the façades.

The old established firm of Peter Robinson is rebuilding a further portion of its establishment at Oxford Circus, the portion now being started extending along Oxford Street and through to Market Place at the junction with Great Portland Street. Messrs. Higgs & Hill, Ltd., are the general contractors, and the steelwork is being supplied by Messrs. Redpath, Brown & Co., Ltd. We hope to give further details in a later issue.

Messrs. Allen Fairhead & Sons, Ltd., are about to commence operations on the site of Nos. 30 and 31 Great Queen Street, Holborn; Mr. Nelson Wise is acting as housebreaker and excavator. The new buildings will extend from Great Queen Street to Parker Street in the rear.

The firm of F. W. Woolworth & Co., Ltd., is erecting another branch stores, this time in Tottenham Court Road. The steelwork is being supplied by Banister Walton & Co. (Manchester), and the asphalte work is by Ragusa Asphalte Paving Co. It has a red and purple brick façade above the ground storey, which will be faced with similar faïence work as to the other branches.

A very large extension of the offices of "The Star" is about to be made, for which Messrs. Trollope & Colls are the contractors; Greenham, Ltd., are undertaking the demolition and excavation on the site.

New Catalogues.

Messrs. Frederick Braby & Co., of Petershill Road, Glasgow, send us their new list describing their "Eclipse" rigid metal strutting (stamped steel). This rigid metal floor strutting is not only intended as a substitute for the herring-bone struts at present in use, but is a simple and efficient re-enforcement and stiffening for all wood framed floors and for strengthening partitions and flat roofs. The struts can be rapidly and easily fixed and their superiority over wood struts can be at once apparent. The struts can be supplied either galvanized or varnished.

The General Electric Co., Ltd., of Magnet House, Kingsway, London, W.C.2, forward us particulars of their "Magnet" domestic electric outfit, consisting of a "Magnet" electric kettle, "Magnet" electric toaster, a 4 lb. "Magnet" electric iron, and "Magnet" portable pedestal heater, at an inclusive price of £5 5s. This outfit consists of standard "Magnet" products, carefully chosen as being of the maximum service to the average householder. Full particulars of the outfit and of the special offer have been mailed to nearly 1,000,000 users of electric light, the information being contained in a folder, No. H.3419, which explains in simple fashion what the "Magnet" domestic outfit will do for the user. We commend the way in which this information is set out, in non-technical language, which will readily be understood by the householder. For instance, it is stated that the electric kettle will boil ten pints of water for just over half a unit of electricity, that the iron will perform three hours' ironing for one unit of electricity, and that the toaster will make over sixty pieces of toast for one unit.

Messrs. Jenson & Nicholson (1924), Ltd., of Goswell Works, Stratford, London, E.15, forward us their manual on the treatment of damp walls, giving particulars of their products which include the prevention of fungoid growth in stone and brickwork, solutions for painting over very damp old cement, plaster, and brick surfaces and making special reference to their naphthalene solution, this latter material enabling painting or wall-papering to be immediately proceeded with over new Portland cement or new plaster. The manufacturers call attention to the fact that "naphthalene" has now been used for a considerable period and has proved to entirely meet the need existing for such a material, in these days when time is the great essential in every contract.

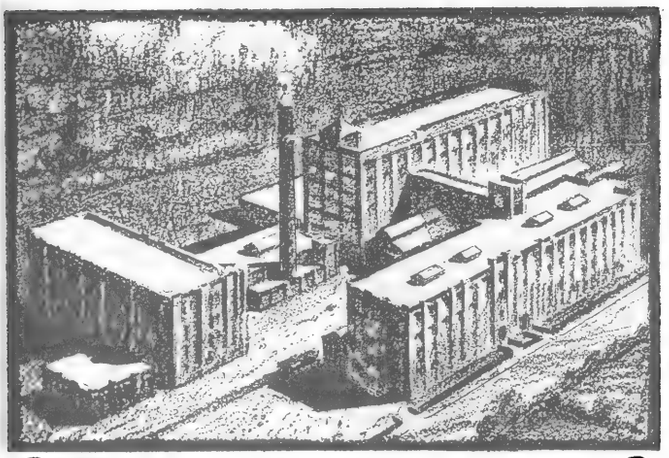
Messrs. McDowall Steven & Co., Ltd., ironfounders, of Falkirk, and Upper Thames Street, London, forward us their new Milton Interior List giving particulars of their stoves. Nineteen illustrations of their dwarf interiors, well printed on art paper, showing their varied designs and giving dimensions and size of fire. Further pages are devoted to stool bottoms and frets, and table trivets.

The Pulsometer Engineering Co., Ltd., of Nine Elms Iron Works, Reading, send us a copy of their abridged catalogue showing illustrations of their "Pulsometer" steam pump with boiler on road wheels, their "Pulsometer" centrifugal pumps and the "Pulsometer" ring pump, filters and ice making and cooling plants, all fully described, with particulars of power, size, etc. Examples may be seen on exhibit at The British Empire Exhibition at Wembley.

From the Rawlplug Co., Ltd., of Gloucester House, Cromwell Road, London, S.W.7, we acknowledge receipt of a new trade booklet, which should be of service to builders, electricians, etc. The invention of the Rawlplug has undoubtedly met a long and seriously felt want, and this booklet very effectively describes the many uses to which Rawlplugs can be most effectively applied, by their general use. There is no need for broken walls in the house and the saving in cost of repair more than pays for the small outlay incurred by their use.

Mr. Robert Adams of Emerald Street, London, W.C., sends us his latest up-to-date catalogue describing his Victor door springs and hinges, ventilating gearing, panic bolts, metal casements and architectural door furniture, etc. The catalogue consists of 96 pages in blue cover and fully describes, giving prices and dimensions of all classes of door and window fittings supplied. The illustrations are shown on such a scale that every fitment can be seen clearly and the prices are given on the same page, so that no time is wasted referring back to some other page, as is often the case. The catalogue in question is a comprehensive book of reference to this branch of building equipment.

Messrs. Ruston & Hornsby, Ltd., the well-known engineers of Lincoln, who were established in 1815, send us their booklet on the Ruston airless injection cold starting oil engine. This booklet is beautifully produced and gives particulars and dimensions of the various B.H.P. engines produced by this company.



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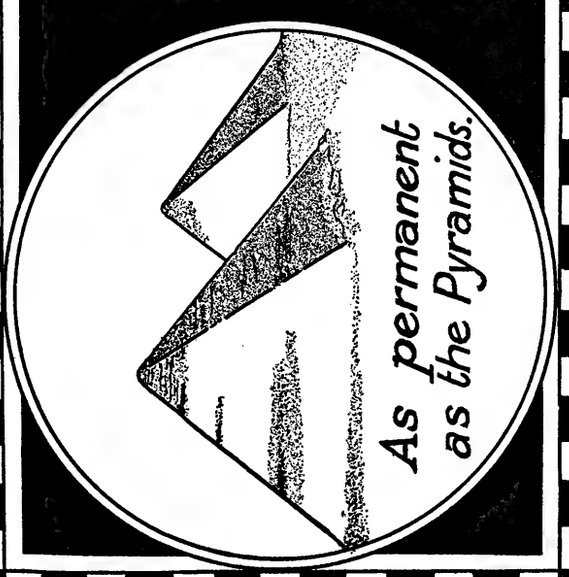

General News.

ASKERN SUTTON.—West Riding Education Committee now propose to proceed with the scheme for the erection of a school at an estimated cost of £12,500.

BARKING.—The Essex County Education Committee propose the provision of dining-room accommodation at the Barking Abbey School at a cost of £3,560.

BASINGSTOKE.—Plans passed: banking premises and offices, Market Place, for Lloyds Bank, Ltd.; Bulk spirit depot railway goods yard for Shell Mex Ltd.

BATTERSEA.—The Gas Light & Coke Co. have purchased the Rifleman public house and the Imperial Wharf for the extension of the gas works at Nine Elms.—A chalet is to be constructed in Battersea Bridge Road.—The provision of a showroom for the electricity department is suggested on land in Lavender Hill.—A new telephone exchange is to be erected in Altenburg Gardens.—Messrs. J. Oswald & Sons propose the erection of a steel framed building at their factory in Sleaford Street.

BERMONDSEY.—The old Parish Street workhouse is to be converted into flats, but in this connection the L.C.C. will only sanction a loan of £12,050 instead of £13,000 sought.

BURTON-ON-TRENT.—The Corporation have accepted the tender of Messrs. A. Holmes & Sons, of Dallow Bridge—£2,675—for the erection of a new fish market.

BRENTWOOD.—Essex county architect has prepared sketch plans for a secondary school for girls, with accommodation for 250 at an estimated cost of £33,000.

BRISTOL.—The Council propose to acquire the Merchant Tailor's almshouses in Merchant Street for the provision of accommodation for the weights and measures department, the present side of this department being required in connection with the new police and fire station.—It is proposed to proceed with the provision of additional shed accommodation at the docks at a cost of £56,000.—A scheme of winter relief work has been prepared involving a total cost of £179,000. It includes the construction of a new road at Fishponds, £49,000, and the reconstruction of Lodge Causeway Bridge, £18,000.—It is proposed to compulsorily acquire land for playing fields for schools in the St. George's district.—A site is being secured at Sea Mills for an elementary school for 1,000 children.—A contract has been placed with Mr. John Knox for the erection of 94 houses at Shirehampton site, concrete construction, 176 also of concrete construction at Horfield and 26 at Horfield of brick construction, at a total price of £126,920, averaging £428 15s. 9d. per house.

CHELMSFORD.—The Borough Engineer has been asked to prepare plans for the extension of the library and museum buildings.—Plans passed: 18 houses, Bishops Road, for Messrs. Golding & Hadler; 6 houses, Moulsham Street, for Mr. T. Letheron. The Corporation has accepted the tender, £22,351, of Messrs. G. J. Hawkes & Sons, for the construction of 50 houses in Brownings Avenue.

CHELTENHAM.—Houses are to be built in Swindon Road to accommodate people who will be displaced by a slum clearance scheme.—Plans passed: rebuilding Nos. 129, 130 and 131 High Street, for Messrs. Boots, Ltd.; new laundry, Naunton Road, for Mr. H. H. Rawlings. Tenders are to be invited for the construction of a filter house and ferro concrete filter tanks at Dowdeswell reservoir.

CONISBOROUGH.—The Board of Education have approved of a proposal for the erection of a middle school and a Roman Catholic school.

EASTBOURNE.—Plans prepared by the Borough Surveyor for alterations and additions to the electricity works and office buildings have been passed.—The Compton estate have approved the principle of turning the houses in Victoria Place into shops.—Messrs. H. Boots & Sons, Ltd., have offered to erect 200 concrete houses at or near the Crumbles and been invited to discuss the matter with the Committee.—A scheme prepared by Councillor Woolnough for a Grand Parade improvement is now being recommended. The estimated cost is £30,000. Plans have now been prepared for extending the seaside baths.—The erection of further shelters on the front is advocated.

EAST HAM.—Plans are to be prepared for extending the offices of the tramways department.

FINCHLEY.—Plans passed: 8 houses, Brooklend Hill, for Messrs. Garsubil, Ltd.; 6 houses, Grove Avenue, for Mr. H. Clare; Sunday school, Northway, for Garden Suburb Church; addition, Moss Hall tavern, for New London Brewery Co.; 6 houses, Chandos Road, for Mr. W. Pigott; 14 houses, Lyndhurst Gardens, for Messrs. Cramb Bros., Ltd.

GUILDFORD.—Plans passed: Additions to Midland Bank, High Street, for Messrs. Whinney, architects; additions, Royal Surrey County Hospital, for Messrs. Hodgson, Lunn & Co.

HACKNEY.—Mr. B. Zinkins is to build factory premises on the vacant site at 215 Mare Street.

HANWELL.—Plans passed: flats, Milton Road, for Mr. R. Vincent; rebuilding Royal Hotel, Boston Road, for Royal Brewery Co.

HERTFORDSHIRE.—The Council proposes, with the financial aid of the Ministry of Transport, to widen the Gt. North Road for fifteen miles from Barnet to Baldock at a cost of £380,000.

HULL.—The Ministry of Health have sanctioned a loan of £17,228 for the proposed new fire brigade station.—The City Architect has prepared plans for the provision of a colony to accommodate 200 mentally deficients.—Fresh tenders are to be invited for the erection of 200 houses to accommodate persons displaced by the new George Street improvement scheme.—A committee is to report as to a site for an open-air school.—A new elementary school is to be provided in the northern district.—The Education Committee are to confer with the Board of Education as to a site for a new secondary school for East Hull.—The St. Paul's school is to be altered at a cost of £500.—Estimates for the proposed new pier and landing stage indicate a cost of £200,000.

ILKESTON.—The Borough Surveyor has been instructed to prepare plans for the proposed slipper baths adjoining the Victoria swimming baths.—Plans passed: 6 houses, Corporation Road, for Mr. Cobb.

KENSINGTON.—The Borough Council have arranged for the provision of shopping facilities for tenants on the St. Quintin housing estate.—The tender, £21,280, of Messrs. F. W. Hidden & Co., Ltd., has been accepted jor the erection of 4 cottages and 36 flats on the housing estate.

LEWISHAM.—Plans passed by Borough Council: 12 shops with flats, Randlesdown Road, for Mr. E. D. Solway; 8 houses, Coniston Road, for Messrs. Scales & Jones; 5 houses, Hither Green Lane, for Mr. G. P. Harding.

LUTON.—Plans passed: 4 houses, Farley Hill, for Mr. J. T. Garrett; 9 houses, Holland Avenue, for Mr. J. Frost; 4 houses, Biscot Road, for Mr. E. J. Tayloe; 4 houses, Alexandra Avenue, for Mr. A. Mardle; 10 houses, Dunstable Road, for Mr. A. W. Oakley. The Corporation have accepted the tender of Luton Building Co., £5,147, for the conversion of Plait Halls into a covered market.

MARKET HARBOROUGH.—The Surveyor has been asked to prepare plans for 25 parlour and 25 non-parlour houses, and also plans for a smaller type.

MARYLEBONE.—It is proposed to construct an arcade from Bell Street to Edgware Road.

NEWCASTLE.—It is proposed to erect a library at Scotswood at a cost of £13,000. A scheme has been prepared for the adaptation of the plunge bath hall at Byker baths into a recreation hall at a cost of £1,000.

OXFORD.—Plans passed: extensions to premises at corner of Park End Street, for Messrs. Frank Cooper, Ltd.; memorial hall, Portland Road, for Summertown War Memorial Committee; lecture hall, Norham Gardens, for Department for Training Teachers.—It is proposed to rebuild the Duke of York public house in Union Street.—The Markets Committee are to consider improvements to the market and the erection of a cover to the sale ring.—Plans have been passed for the layout of the Gipsey Lane housing site.—The Iffley Glebe land is to be purchased for £4,870 as a housing site.

PETERBOROUGH.—The Town Council are considering the erection of 16 houses at the junction of Grange Road.—The Council are inquiring on behalf of the Farmers' Union for a site suitable for the erection of a sugar beet factory.—A scheme for extending the electricity area to Stamford, Eye and Whittlesey at a cost of £15,750 is being considered.

ROMFORD.—The Urban District Council are to make up a footpath on land surrendered by Messrs. Sainsbury, who are erecting six shops in South Street.

SELBY.—It is now proposed to proceed with a scheme for the erection of an elementary school, estimated to cost £14,500.

SHIPLEY.—The Surveyor is to prepare plans for a small-pox hospital in brick and rough cast.—The architect, Mr. Dawson, has prepared plans for a maternity and child welfare centre at the grounds of Somerset House, the cost being estimated at £4,750.

SHEFFIELD.—Plans passed: 4 houses and shops, Ringinglow Road, for Messrs. Malthouse, Ltd.; 4 bungalows, Rundle Road, for Mr. W. Ramsay; 10 houses, Sandygate Road, for Mr. J. Samuel.

SHITLINGTON.—A new school for 450 children is to be provided by the West Riding Education Committee.

STANFORD LE HOPE.—A new Roman Catholic school for 100 children is to be built in Southend Road.

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FIGURE REPRESENTING CIVILISATION FOR THE BRIDGWATER WAR MEMORIAL, 1924.
JOHN ANGEL, F.R.B.S.

Thomas Edward Collcutt.

THE LATE T. E. COLLCUTT, F.R.I.B.A.

From a drawing by GINSBURY.

His colleagues and friends will alike feel that death has taken away one whose sterling qualities and great refinement of mind endeared him to an extent which was exceptional. It is not so much his architectural ability, considerable as that was, by which Collcutt will be remembered with affection, but for his warmth of feeling and kindness combined with absolute rectitude of purpose and conduct, his friendly interest in his fellows and his capacity for unselfish work.

Born in 1840, he lived through the period of the Gothic Revival, though most of his best known works are of a free Renaissance type. His best known work, the Imperial Institute, was the outcome of a limited competition, one of the few in which he met with success, as he was not fortunate in his competition experiences. The Blackburn Free Library, dating from 1872, and the Wakefield Town Hall, were among his chief public works. His practice was chiefly associated with commercial buildings, among which may be mentioned Lloyd's Registry, the Palace Theatre, the P. and O. Offices in Leadenhall Street, the City Bank in Ludgate Hill, the Savoy Hotel and Wigmore Hall. He also carried out a large number of country houses. His design was perhaps considerably influenced by his earlier experiences, for as a younger man he designed furniture anonymously. It was probably for this reason that he showed a tendency to indulge in small detail, many of his designs showing a certain lack of unity. But they were never florid or vulgar, and always interesting and refined, and invariably bore the signs of the great care and effort which Collcutt expended on everything he undertook.

He received the Gold Medal of the Royal Institute of British Architects in 1902, was President in 1906–8, and was the recipient of many foreign honours and decorations.

He had retired from active practice some two years ago to the great regret of many of his friends and colleagues, who felt the severance of his active association with a calling in which he occupied an honoured place.

One never felt with him that one was talking to an old man, for though he was one of Street's assistants he yet contrived to keep abreast of the altered conditions of the age in which we lived and its newer problems and among them he took the keenest interest in the subject of housing, his schemes for dealing with which were tinged and brightened by the generosity of his nature.

His contemporaries included Sir Aston Webb, Sir Thomas Jackson, Brydon Mountford, and in the series of competitions he took part in in the middle span of his career he often failed to secure success, but never the recognition which is accorded to work which admittedly reaches a high standard of excellence. The profession always felt that his success gave them personal pleasure and gratification. Those who came in contact with him always instinctively felt his essential goodness and kindness; his sense of humour and his keen interest in life. He was essentially conservative in his attitude of mind, but his outlook was tinged by an altruism which led him to believe in the practicability of many far-reaching schemes of social improvement and their expression in architectural forms. He was one of those who among disappointment and difficulty never lost sight of the promised land.

Of him it can be said that few men have been loved so much by their fellows.

Our Illustrations.

PROPOSED HOUSE IN HERTFORDSHIRE. Lowry & Woodhouse, Architects.

COTTAGE AT CLAYGATE; HOUSE, KING'S DRIVE, THAMES DITTON; HOUSE AT PINNER, MIDDLESEX.
G. Alan Fortescue, Architect.

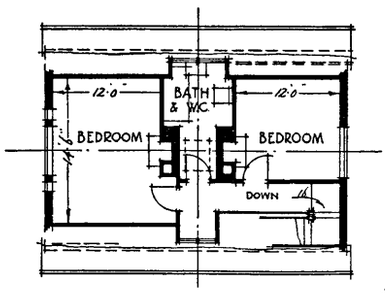
THE STAIRCASE, MANOR HOUSE, HACKNEY WICK. H. S. Goodhart-Rendel, Architect.

COTTAGE AT CLAYGATE.

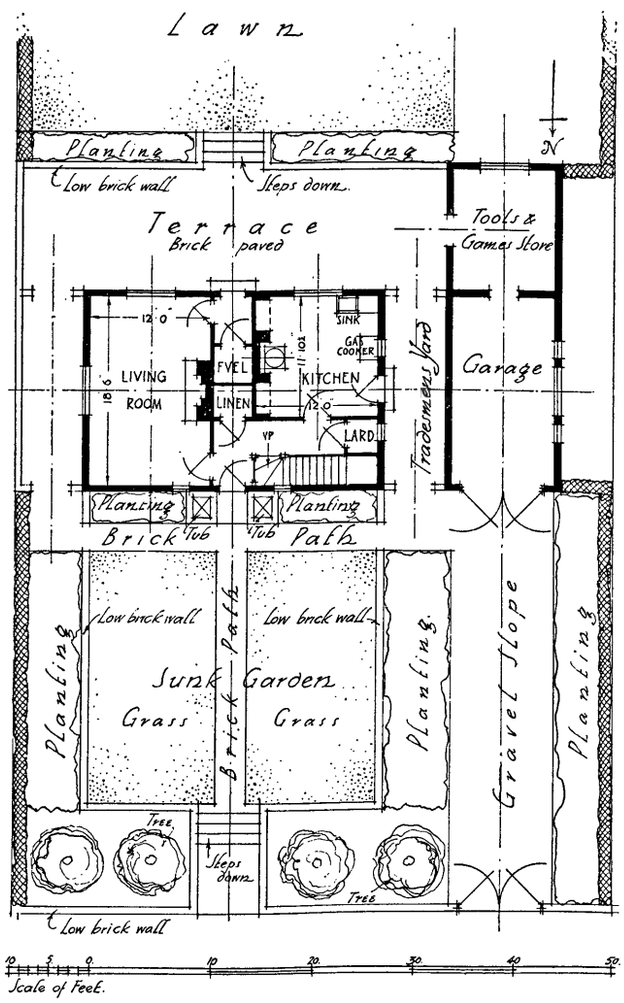
G. Alan Fortescue, Architect.

Built on sloping site. Forecourt sunk and surplus soil taken to rear of house to form terrace.

Built of brick, rendered outside with Portland cement. Last coat finished with "wood float." Twice distempered in "Duresco." Brick plinth twice tarred. Roof covered with old hand-made sand-faced tiles. Valleys to "dormers" have been "swept." Gable ends above first floor windows filled in with split elm boarding. Approximate cost, £750.



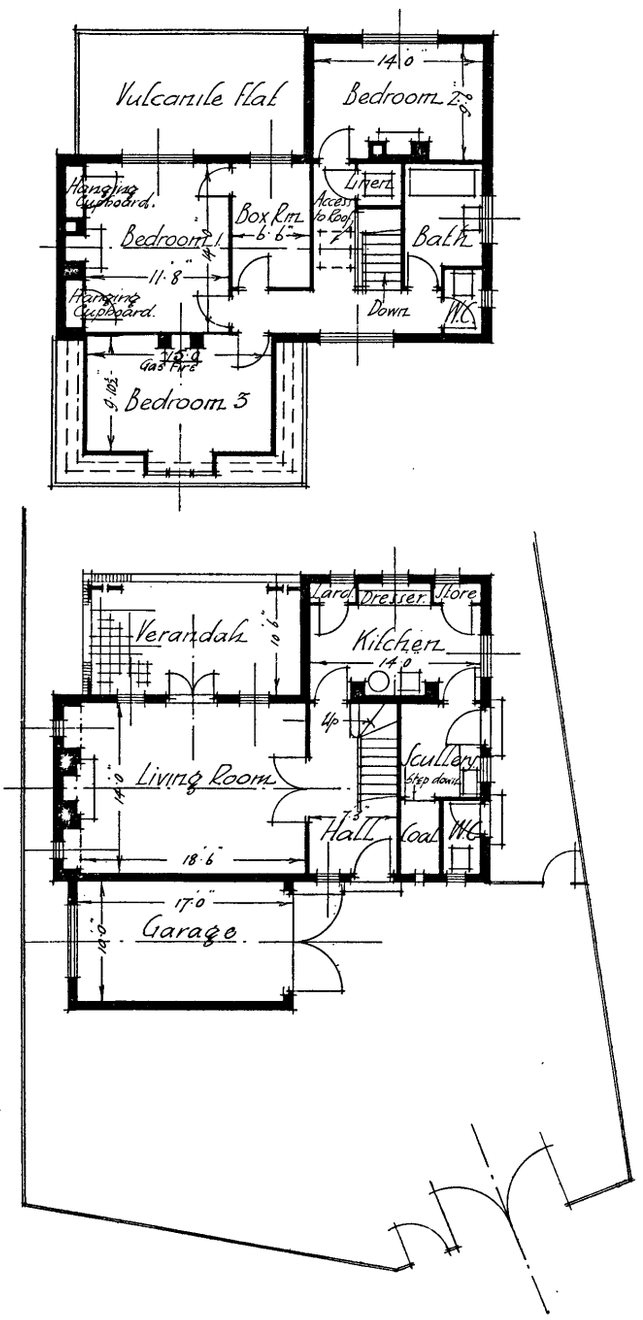
FIRST FLOOR PLAN



HOUSE, KING'S DRIVE, THAMES DITTON.

G. Alan Fortescue, Architect.

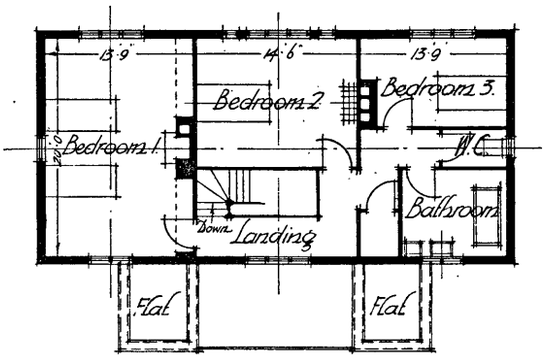
Built of brick, rendered outside with Portland cement. Last coat finished with "wood float." Twice distempered in "Duresco." Brick plinth twice tarred. Roof covered with old Cornish slates of varying colour. Eaves project 2 feet 6 inches, and boarded with v-pointed boarding. Standard steel windows built into wood frames. Internal sills 6 inches by 6 inches. Quarry tiles. Brick fireplace in living room formed with 6 by 3 by 2 red sand-faced briquettes. Approximate cost, £1,150.



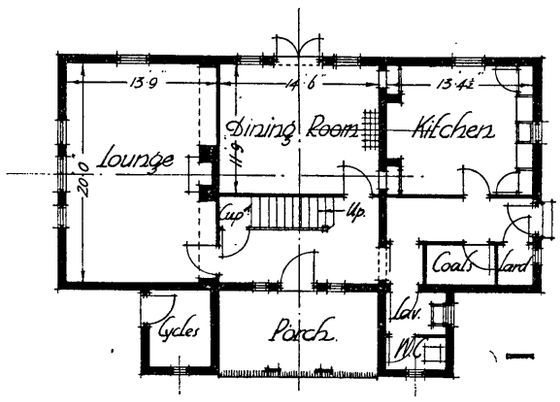
HOUSE AT PINNER.

G. Alan Fortescue, Architect.

Built in brick, rendered outside with Portland cement. Last coat finished with "wood float." Twice distempered in "Duresco." Brick plinth twice tarred. Roof covered with Roman tiling. Approximate cost, £1,500.



First Floor Plan.



Ground Floor Plan.

The Bridgwater War Memorial.

By John Angel, F.R.B.S.

In this War Memorial (designed for the busy little town of Bridgwater) I have deliberately set out to break fresh ground in War Memorials. I think it will be generally agreed that it is as fitting a thing, in commemorating Victory, to represent the "fruits" of Victory, as it is to represent a portrait of the men who won it.

The task, however, is not so simple as the more obvious form. One has to place the work entirely in the category of symbolic art, and necessarily in the impersonal and conventional style rather than the realistic.

In explaining briefly the main intention of the design I shall try to show how each idea was arrived at, and why I added the three groups in high relief at the back of the design at a later stage.

The whole scheme is an attempt to show in concrete form what our soldiers fought for, and what we hope they made a great step toward winning; that is:—"To uphold the best form of Civilisation we can conceive of, which is the Reign of Law, based upon the common consent of the governed, and supported by the united and enlightened opinions of mankind."

This was the basis I began with, and I then set out to design my work in the following manner. The central figure represents "Civilisation" seated as a queen upon a throne. On her lap she supports the "Book of Law," and whilst with her left hand she bids attention by its upraised gesture, she holds aloft in her right hand the orb in the shape of the World. I have designed four figures upon this globe to represent the four quarters of the earth. They in their turn are supported by doves under their feet, whilst they hold in their hands a single band which extends from hand to hand, thus connecting the world from East to West in a single fraternity.

Under the feet of Civilisation I have put the concomitants of War, such as "Strife," "Bloodshed," "Corruption," and "Despair."

The two guardian angels which protect the "book" were introduced because there is most certainly a spiritual element necessary to enable "all people" to keep the law. And it will be seen that the angels' wings form a canopy at the back of the group which shelters three small groups in high relief. They represent Labour, Education and the Home. I placed these groups there partly that the back of the large group should have interest as well as the front, and partly because they symbolise the three main struts of our Civilisation.

The whole monument is 18 feet high. The bronze group here represented occupies 7 feet 6 inches of that height.

Notes and Comments.

The L.C.C. and Housing.

Col. Levita, the chairman of the L.C.C. Housing Committee, in an interview with the representative of a paper, said:—

"I am handling the biggest scheme for housing Londoners since the Great Fire," he said. "By next March, when we have cleared out 70 acres of slums, the L.C.C. will have, at a conservative estimate, nearly a quarter of a million tenants.

"We have got to build houses, and the quicker we do it the better. Private enterprise cannot do it.

"But if prices rise against me again—"

Here Colonel Levita sighed, sat down wearily, and pointed in the direction of Brighton.

"The population of the whole of Brighton is about 147,000," he said, "and the women in council there are saying this sort of thing:

"'Why can't we have white tiles in the bathroom?'

"'Can't we have the latest electric gadget fitted in the kitchen, and a wider staircase?'

"Instead of taking an interest in their local authorities," Colonel Levita continued, "they listen to Labour orators talking what I call 'dead baby stuff'—urging them not to live in 'pill-boxes' and 'rabbit hutches,' and saying that Council houses are unhealthy.

"What women will not see is that this sort of silly sentimentality runs up the price of houses.

"Builders are not sentimental men, and when you ask them for frills on a house they want paying for it.

"A person who buys in a sentimental frame of mind is a precious poor buyer. The country is poor enough already, and London must buy its houses in a business-like frame of mind.

"The municipal elections are coming along, and Labour speakers will begin again to deliver the usual 'sob stuff' about slums and crowded houses.

"But don't forget that it is chiefly conservatives who are running this scheme to clear away slums all over London and to build at least 12,500 sound, sanitary houses every year from now onwards."

We think this is very apposite at the present time, and that Col. Levita is justified in the strong criticisms he indulges in.

An Abortive Scheme.

The criticism and approval of the Bush House building scheme was certainly initially based on the consideration of the central blocks as flanked by the subsidiary buildings to right and left of it which render the base flanking walls reasonable and appropriate. First we learn that the central

DETAIL OF ONE OF THE SIDE FIGURES OF THE BRIDGWATER WAR MEMORIAL, 1924. JOHN ANGEL, F.R.B.S.

HEAD OF THE CENTRAL FIGURE, ILLUSTRATING CIVILISATION, OF THE BRIDGWATER WAR MEMORIAL, 1924. JOHN ANGEL, F.R.B.S.

dominating feature which was to crown the whole group is to be omitted though the receding stages which lead up to it are built, and now it is stated that the Bush Company have abandoned their option on the sites on either side, on which the subsidiary buildings were to be placed. As a result London has obtained a part of a scheme which, considered on its own merits, cannot be held to be a satisfactory composition. There ought to be a method of avoiding such an *impassé* and for the ground landlords obtaining some sort of an assurance that a building scheme should be carried out in its entirety. A building which is carried out and completed as a whole may often be a great architectural addition to a locality, but a maimed and truncated project is the reverse.

A Confusion of Terms.

The " Westminster Gazette " states that contracts for a hospital at Manchester and an extension to the Harrogate Infirmary, together worth £350,000, have been awarded to Messrs. Elcock and Sutcliffe, a London firm of architects.

What has really happened is that the latter firm have won the hospital competitions estimated to cost the sums stated.

The " Westminster Gazette " does not appear to realise that an architect does not contract to execute building, but only to supply professional services in connection with it.

He may or may not have a formal contract with his employers as to his fees, but that is in any case the only contract he enters into, and more often than not such a contract is only embodied in letters which are exchanged, while in other cases no letters on the subject pass.

DETAIL OF SIDE FIGURE OF THE BRIDGWATER WAR MEMORIAL, 1924. JOHN ANGEL, F.R.B.S.

Building Trade Notes

By H. Bryant Newbold, M.S.A., A.I.Struct.E.

Private Enterprise.—Whilst this is not the place for the obtrusion of politics, whatever the views of our readers may be, and whatever the future may hold for us, research into the past must prove beyond argument that the first blow to private enterprise in the building industry was dealt by the Lloyd Georgian Land Acts, and that ever since, the intervention of the Government into the affairs of the industry have rendered it less and less an attractive enterprise for the investment of private capital. Whether or not the motive force behind all subsequent legislation applying, has been the socialistic yearnings for State control may be a matter of opinion. But, a fact it certainly is, that prior to the introduction of State housing schemes, there was no housing problem in the sense that we know it now. Further, it is a fact with which there will be found no one to disagree that no Conservative Government originated State interference with the building industry.

If the restriction of private enterprise had resulted even in a satisfactory reduction in the shortage of houses, the foregoing would be valueless. But it has not. On the contrary, before the introduction of State interference with building, there was a surplus of houses. To-day, after nearly twenty years of State interference, there is an ever growing surplus of homeless persons.

These are the facts. Whatever may be the remedy, it is for our readers to satisfy themselves; and to apply it energetically. And in so doing, it should be remembered that housing is only a part of the building industry. Commercial undertakings cannot stand still. They must either go backwards or forwards. The backward movement means bankruptcy and the forward, the circulation of money, increase of business and employment, and the consequent need for larger premises.

But for such a condition of expansion, it is essential that confidence in the return to be gained from investment should be re-established. Can anyone, whatever his political views, say that such confidence now exists?

Wages Settlements.—The National Federation of Building Trades Operatives have resolved to withdraw from the National Wages and Conditions Council; and throughout the country, amongst the employers there is a growing dissatisfaction with national regulation of local differences. Views are everywhere expressed in the provinces that persons on the spot and living amongst the conditions, are best able to deal with those conditions. Especially is this the case in the North where there is still a very strong liking for the Regional Joint Council known as the Northern Centre Board. It has been generally agreed previously that the National Wages and Conditions Council Agreement should be altered to permit of greater freedom locally and adjustment to local conditions; and now that the operatives have resolved to withdraw altogether it may be wondered what is to be the outcome.

Whatever its faults—and in view of the growing necessity for recourse to outside arbitration, it would seem that the Council had ceased to function to the entire satisfaction of either party—whatever faults the National Wages and Conditions Council had, it certainly had a value in that it tended towards the prevention of frequent outbreaks of local disruption. Persons in a locality may know one another better, just as do the members of a family, but the close contact and familiarity is often the main cause of frequent quarrels. Whereas reference to the National Joint Council had the result of obtaining discussion at a distance and in an atmosphere more removed from the centre of discord. So that if the discontinuance of National Settlement is to result in more frequent local disputes, it would seem that a less settled state will pervade the industry than has been the case even during recent times; and this has been none too satisfactory. Whatever course it is decided to adopt, it is to be hoped that a fuller recognition will be given to the indisputable fact that prosperity is only to be achieved by any and all of the parties concerned by means of an atmosphere of peacefulness, goodwill and stability.

Apprenticeship.—If a return of prosperous conditions were to come it is doubtful if the industry is in a state to reap the full benefit therefrom. For the housing shortage is not the only one. There is a shortage of tradesmen amounting in all to over 100,000 less than in 1914. This shortage is a very serious matter and is due to several causes. In the first place, it is no doubt due to the fact that members left the industry in 1914, and the subsequent years of war, and did not return to it for one reason or another. But over and above, and far more serious than this non-return, is the fact that the entrance of newly trained men has been denied. In this, both the operatives and the employers are equally to blame, and though the reasons are different, they are equally shortsighted.

The Operative's view that the less men there are to do the work the more work there will be for each, in common with his view that the longer he takes over a job the more employment there will be for all, overlooks the simple principle that work makes work. Consequently the less waiting there is in the turnover of invested capital, the quicker comes its release for further investment, whether this waiting be occasioned by dilatory work or lack of men.

Another reason for the shortage is the employers' objection to train apprentices, who, it is claimed, leave them upon completion of their term and go to work elsewhere, it may be for a competitor. This view appears at first sight more reasonable but it is, none the less, a shortsighted one. Surely it is not beyond the power of the united intellect of the employers to devise a scheme for training centres, to which all might contribute at rates in accordance with their annual turnover, and from which all might draw trained men in accordance with their requirements. The course would need to be an intensive one to meet the present urgency; and in this the circular which has been issued by the Board of Education to local authorities and governing bodies to the end that the training of apprentices shall be undertaken and accelerated should prove helpful.

But the employers may have reason to ask themselves if they have been wise in delaying a settlement of the matter so long as to allow the Government to contemplate direct action with the municipal authorities. This may seem to some a step bringing building by direct labour the nearer; in any case, if the employers are to prevent their own elimination, as is so often maintained by the socialists in the industry to be their ultimate end, they will need to employ tactics more energetic than mere "stone walling." What Mr. Wheatley has said as Minister of Health may not matter much, but nevertheless it may serve as yet another straw to show which way the tide is setting; and when he declares, as is reported of him as having declared at Glasgow, that the sooner the housing question is rid of contractors the better, the same may soon be applied to the apprenticeship problem unless some effort is made by the employers to arrive at a satisfactory solution.

Concrete Houses.—Should the efforts of the Committee appointed to enquire into the various methods of house building be continued there can be no doubt that the claims of concrete will be very carefully considered. And whilst it may transpire that concrete has many advantages over brickwork, the speed of erection and reduction in the cost of labour being by no means the least of these, it is to be hoped that if the palm be finally given to some system of concrete blocks, it will be to one which overcomes the main objection to all such systems. This is, of course, the attractive power that the joints seem to exercise over moisture. If cement or mortar joints do attract moisture it would seem reasonable to expect more damp where the joints are more plentiful as in brickwork. But for some reason this is not the case. Damp collects at the jointing of concrete blocks and remains there, even when the blocks

are covered with stucco or rough cast, and this may be due to the very impermeability of the block itself and the different relative powers of absorption of bricks and mortar joints and concrete and mortar joints. In the first case water may be absorbed more equally. whilst in the second it is forced and attracted to the joint from whence, being accentuated, it takes longer to evaporate and so percolates through the joint. However this may be, it is a defect to be guarded against, and to be overcome by any system of concrete blocks which is to give permanent satisfaction to the tenant.

Number of Bricks per Day?—A correspondent from America enquires, "What is the average number of bricks that can be laid by one man per day in England?" In America, he states that this averages from 700 to 1,500. He also enquires whether machinery has been used for this purpose. The experience of our readers in the above would prove interesting and serviceable in the compilation of useful data; and we hope in a subsequent issue to give illustrated particulars of machinery used in bricklaying.

Concrete Roads.—Another correspondent interested in roadmaking requires information as to methods of hardening road surfaces. In reply we would draw his attention to the method advised by Messrs. Brunner, Mond & Co., Ltd., of Northwich, in which a solution of silicate of soda is used both for hardening and for waterproofing. We would suggest to our correspondent that however satisfactory such a treatment may be for wall surfaces, it is in its reinforcement that the strength of a road consists, and that it can scarcely matter how hard the surface of a road may be if its foundation and reinforcement are at fault. We hope to go into the matter of reinforcement more fully at a later date when space permits.

Birmingham University.

1st Town Planning Lectures.

By Professor William Haywood.

The lectures on historical town planning will be abridged this Session to make room for additional lectures on the Sociological and architectural aspects of the subject.

This modification may be regretted at a time when public interest in ancient town planning is being rapidly extended by the publicity given in the press to many new discoveries; but there can be no doubt that the practical value of the course, as a whole, will be enlarged by the new programme.

A brief consideration of town building during the period 2500 B.C. to the fall of Rome will show that where towns are contemporary with the early and unaided struggles for security of their inhabitants, no ordered planning is to be expected; and as a matter of fact the street plan of such towns is usually as casual as that of a nineteenth century industrial city which has been neglected for struggles of another kind. Hundreds of towns, however, were built during this period to a regular plan (always some variation of the gridiron pattern), and these are either military settlements or cities built by vigorous and mature communities which had reason to abandon their original settlements.

The first notions of formal town planning appear to have originated in the East. (Hippodamus, an Ionian of the 5th century B.C., is the first professional town planner known to us.) Many towns were fully planned and built in Asia Minor after the Alexandrian wars, and there are building by-laws of this period which anticipate the very latest modern practice. There is a law, for instance, which banishes obnoxious trades beyond the city walls; another for fixing the widths of new roads and charging road maintenance upon adjoining owners, and so on.

The eastern origin of town planning is supplemented by evidence of formal town structure found in the North Italian Terramara, i.e., fortified settlements of supposed lake dwellers dating back to 1400-800 B.C. These settlements are as precise in plan as a Roman military camp, and by tradition or discovery may have influenced Roman methods.

From about 200 B.C. onwards, Rome founded some hundreds of colonial cities in which streets and buildings were planned as a whole. Turin, built by Augustus about 28 B.C., is one of many Italian cities in which a Roman street plan is still retained as an essential part of the modern town.

Timgad, Ostia and Pompeii are examples of Roman planned cities in which the actual roads and materials of the period have been preserved without intermediate use.

The city of Rome grew slowly and irregularly, and was always badly planned, despite costly efforts to replace its central congestion by a wonderful series of fora. The licence of irregular growth was first checked by Augustus, who limited the height of buildings to not more than 70 feet. Trajan reduced this to 60 feet, and Nero not only fixed the height of future building at not more than twice the road width, but required new streets to be wider, and compelled private owners to build more substantially.

By the 4th century A.D. tenements in Rome outnumbered the domus or single top-lighted type of dwelling, by twenty-five to one; and at Ostia, the port of Rome, we find remains of 2nd century tenements with complete tiers of flats, identical in plan, and lighted back and front in the modern way. From which it is evident that a residential street in ancient Rome was far more modern in character than was supposed when Pompeian housing was taken to be the predominant type.

Book Notes.

"The Dunlop Guide to Great Britain." Published for the Dunlop Rubber Co., Ltd., by Ed. J. Burrow & Co., Ltd., Cheltenham and London. 5/- nett.

This is a well-arranged book which gives ample information to the touring motorist in as concise a manner as possible. The maps at the beginning of the book are extremely clear and quite detailed enough for sole use on a long journey. One of the most useful features is the Town Plans, which are extremely simple, and the motorist should find these invaluable, as much time is often wasted in finding the right road out of a town. Parking places and speed limits are points which seem to stand out amongst a variety of exceedingly useful information, also the very full description of London, which is generally so badly neglected as far as the motorist is concerned. The book is printed in good type on damp-resisting paper, and should prove a useful addition to the motorist's library.

R.I.B.A. Board of Architectural Education.

The designs submitted by students exempted from the Final Examination (with the exception of the subject of professional practice) will be on exhibition from Monday, October 20, to Thursday, October 30, 1924, inclusive, in the Galleries of the Royal Institute of British Architects, 9 Conduit Street, W.1. The Exhibition will be open daily between the hours of 10 a.m. and 5 p.m.

The R.I.B.A. Board of Architectural Education Silver Medal for Recognised Schools is awarded for the best set of designs submitted at this Exhibition. This year the following schools, which have courses of five or more years' duration recognised by the Royal Institute for the purpose of exemption from the Final Examination have sent exhibits:—The Architectural Association (London); School of Architecture, the University of Liverpool; School of Architecture, the University of London; School of Architecture, the University of Manchester; Glasgow School of Architecture; Robert Gordon's Colleges, Aberdeen; School of Architecture, McGill University, Montreal.

A New "Magnet" Fire.

The General Electric Co. Ltd., have just introduced a new pattern of "Magnet" Electric Fire which, by virtue of its compact design and moderate price, should find considerable favour this autumn.

This fire is eminently suitable for heating small rooms, offices, etc. It is light and portable, and is fitted with a back stay and handle. The front is of cast iron, finished in black enamel, and presents a very neat and workmanlike appearance.

Measuring only 12½ in. in height by 13½ in. wide and 7½ in. deep, this fire can be arranged to consume either 1,000 or 1,500 watts. A switch mounted on the front of the case controls half this amount.

Moderately priced at 31s. list, this "Magnet" fire offers an attractive proposition, especially during the between seasons when small power heating units are particularly favourable.

Gazebos and Belvederes

By Charles G. Harper.

THE CHURCH AND THE GAZEBO OF CAMPDEN HOUSE AT CHIPPING CAMPDEN.

The typical old country mansions of England are those which are secluded in their great parks. You who tour the roads and have no occasion to call at these noble residences, are thus never in the least likely to see them; unless indeed from some distant commanding spot you may dimly see where they are seated, amid the clustered boscages of their broad acres. All that he who goes along the road will see that hint of those lordly mansions' existence is the lodge, with its generally closed gates, admitting to the drive or the avenue. It seems of necessity to follow that life, for some people in those great ancestral seats, must at times have been extremely dull. There comes a time when folk grow tired of their own society, and profoundly bored even with the conversation even of those they may love best. I rather pity the great ladies of the eighteenth and the early years of the nineteenth century who lived in the country, in the seclusion of those mansions, and those many-acred parks. My lord and the squire, and their friends had a jolly time. They went out and about. They hunted, they had county affairs to see after, but the ladies pretty generally stayed at home, or rumbled cumbrously and slowly along in the family "chariot," as the carriage then was styled, to visit other secluded ladies in equally vast parks and eremitical mansions. The tradesmen's wives in the country towns, had, you know, the better time in one respect. They could sit in the window over the shop in the High Street, behind the curtains, and, unseen themselves, perceive all that went on in that thoroughfare. In that feminine occupation, infinitely pleasing to the feminine mind, they could inform themselves of everything that did not concern them, and pass it on, into the general stock of, let us hope, but not expect, amiable gossip. Those windows in the High Street were, of course—they still are—their gazebos, their watch-towers upon the doings of the day. But my lady of The Abbey or The Hall had no such resource, as a rule. The world went by the park gates in coaches, in post-chaises, and on foot, and she commonly knew nothing at all of it; she might in some respects have been immuned in an asylum.

Sometimes this deplorable state of affairs was remedied. The squire or my lord built on the park wall a summer-house, as we might call it, or a pavilion. In those times they styled these things "gazebos," and more rarely "belvederes." There are a good many of them still in existence, but they long have been given over to dust, damp, and spiders; for no one in these times has any sort of use for gazebos on park walls, for the very reason that no one now need sit, lonely, at home in the old mansion, for lack of means to get out and about.

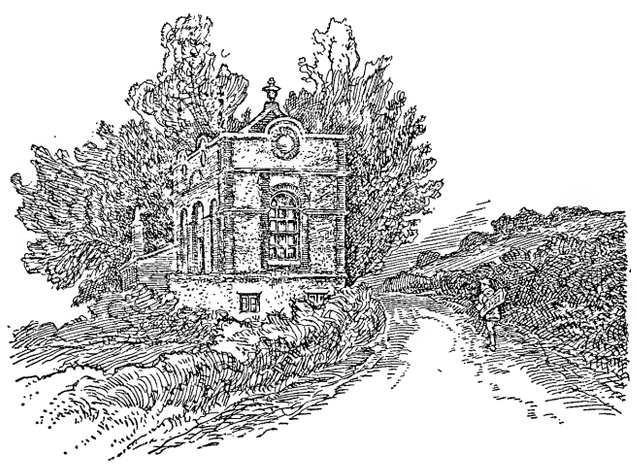
I have mentioned the eighteenth century in this connection, but there are excellent architectural examples of gazebos of an earlier date than that. The idea of the gazebo came, as the name of it would suggest, from Italy. They were an introduction of the Italian Renaissance. In that style was built the noble mansion of Campden House, at Chipping Campden, in Gloucestershire. It was Sir Baptist Hicks who, in 1613, built that lordly place. It is said to have been the largest house ever built in England, and it stood on eight acres of ground. It lasted only thirty-two years; for in the Civil War it was burnt by Prince Rupert, lest the Puritans should establish themselves in it. Almost all that remains is the stone-built and stone roofed gazebo that stood overlooking the wall of the garden. There it is yet, hard by the entrance to the noble parish church.

But my prime example of a gazebo is that which is perched on the wall of Stowey Court's gardens. This is at the entrance to the village of Nether Stowey, in Somerset, on the road from Bridgwater to Minehead. Overlooking the main road from a garden of no great extent, so that it is easy to go to and from it and the mansion, it is still more or less in use. This gazebo has a roof of ogee shape, very like that at Chipping Campden.

A remarkably charming group is formed at Mancetter in Warwickshire, by the white-faced old Manor House, with its half-timbered wings and the two square gazebos on the garden wall, in conjunction with the ancient parish church. The site faces the old Roman "Watling Street,"

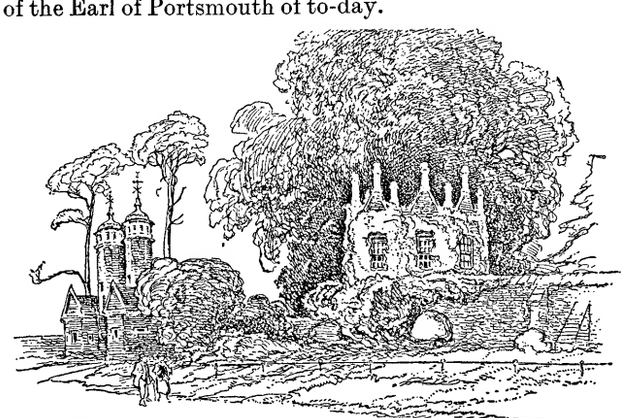
GAZEBO AT MANCETTER MANOR HOUSE.

at this part still in use as a main road, at the approach to Atherstone. Mancetter Manor House is not only picturesque, it is historic, as well; for it was the home of George Glover, one of the Mancetter Protestant martyrs who suffered at Coventry, for conscience sake, in 1555.



GAZEBO AT HURSTBOURNE PRIORS PARK.

A curiously prominent eighteenth century gazebo is that built within the hedge of Hurstbourne Priors Park, in Hampshire, between Whitchurch and Andover. It overlooks the old Exeter Road, and when it was built it afforded the ladies of the mansion, which you see in the distance, from the roadway, an easy way of seeing how the world wagged. The Earl of Portsmouth built it, of flint, with red brick dressings. It is a large specimen of a gazebo, with a very considerable room within. Beneath, in less stately apartments, lives one of the employés on the estate of the Earl of Portsmouth of to-day.



GAZEBO AT LONG MELFORD HALL, SUFFOLK.

A pretty little gazebo, eight-sided and with shuttered windows and a pyramidal roof, stands upon the wall of a garden in part of a large old mansion at Attleborough in Warwickshire, close by Nuneaton. There is a very old and stately octagonal specimen, red brick, adjoining the park gates of Long Melford Hall, at Long Melford in Suffolk. The great mansion and its park wall and the gazebo are all Elizabethan, but the windows of the gazebo seem to have been remodelled quite early in the eighteenth century, for they have the characteristic sashes and proportions of the period of that age when tea first was taken in England: the age of Queen Anne. No doubt the ladies of the Hyde Parker family, the family which owned Long Melford Hall then, and own it now, often sat taking tea in this most stately of all gazebos, looking upon the road into that very well-named "Long" Melford.

ST. ANN'S GATE, SALISBURY.

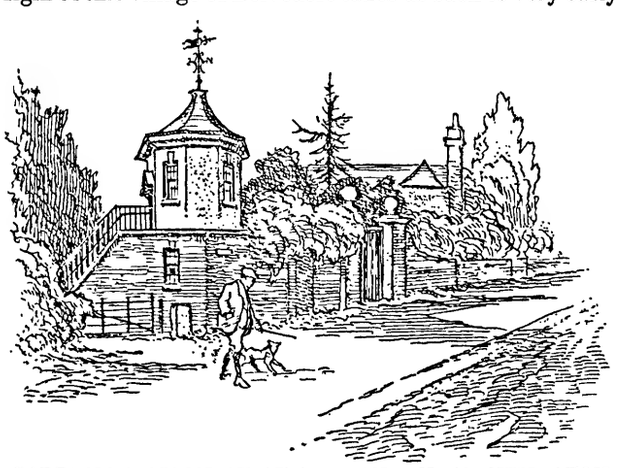
There will be seen by the inquisitive in these matters at Salisbury, a very charming little gazebo window also of perhaps the time of Queen Anne, built out of the mediæme wall of the Cathedral close adjoining St. Ann's Gate. It is that gateway into the Close which faces directly upon the old coach road; the highway which is yet the main route to Exeter; and there can be no doubt but that someone who lived in the house on the other side of this wall, and could look inwards only, upon the quiet lawns and lofty elms that surround the Cathedral, had grown rather tired of the quiet, and so cut himself a hole in the outer

GAZEBO AT NETHER STOWEY.

wall and made his pretty old-world window to the end that he might see the traffic going to and from the West of England. It is a charming group of ancient, crumbling precinct walls, trees, gateway and gazebo window that here you see.

There are even gazebo-windows in a good many of the older houses that look upon the street in dirty old Brentford. It has long been a crowded street, for it served for both those great highways in their initial stages into and out of London; the Bath and the Exeter roads. But, after the long and repeated threatenings of reform for many years, Brentford's High Street presently will case to be a thoroughfare fronting upon a main road; and so too will that length of road just beyond it, on the way to Sion Corner and Hounslow, where there may be seen, on the right hand, a queer wooden octagonal gazebo, perched upon the garden-wall of an old mansion whose windows just fail to command the road and its doings. No one, to my own observation, has used it for many years past.

There is even a place, and a place with a railway-station, not far from London, named after an old construction in the nature of a gazebo. It is Belvedere, near Erith. The origin of this village of Belvedere takes us back to very early



GARDEN-PAVILION AT ATHERSTONE, NEAR NUNEATON.

in the eighteenth century, when a mansion of that name was built on the pleasant wooded hill-top overlooking the busy estuary of the Thames. Hence "Belvedere," from the Italian *bello vedere*, a pleasing view. This mansion was rebuilt in a "classic" style, in red brick, about 1764, by Lord Eardley. A still wider view is obtained from a prospect-tower in the grounds. The park was greatly cut up for building purposes in 1859, and the village then sprung up. The mansion itself was purchased for £12,000, and opened as a home for old sailors, the "Royal Alfred Institution for Aged Merchant Seamen," in 1867.

In the pleasant region of Hertfordshire, along the slow-moving waters of the river Lea, there stands, very much unaltered, the quiet, yet busy and prosperous old town of Ware: that ancient place which is yet faithful to the malt trade, on which its first prosperity was built up. Ware stands for brewing-grains. The chief street of the town yet contains many seventeenth century houses, homes of the old maltsters. They are, many of them, charming, alike exteriorly and internally, and are approached by quaint courtyards; with the maltster's residence on one side and his offices on the other. At the further end of these courtyards runs the river Lea; and nothing is more curious, in any general view of Ware from the other side of that stream than the long line of old gazebos, belvederes, or garden-pavilions pertaining to the gardens of those old-time maltsters.

All of them are in wood, and some resemble in outline the pretty little garden-pavilion overlooking the road at the approach to that other Atherstone; the Warwickshire village of that name, near Nuneaton. This delightful feature of an old mansion is, however, in red brick. This village adjoins that of Chilvers Coton, in what often is called the "George Eliot Country"; Chilvers Coton being the place styled by her "Shepperton": for a not insufficient reason, the real name of the place meaning "Sheep's Cot."

There are, no doubt, many other gazebos in the country to reward the diligent seeking of those interested in the subject; but perhaps these examples will serve.

BARNSLEY.—A site at Wilthorpe housing estate has been allocated for the erection of an elementary school.—The Manor House site has been agreed upon for the erection of the proposed mining college and technical institute.—Information has now been obtained as to departmental requirements in the new town hall scheme and forwarded to the Borough Surveyor, who is to report on the accommodation which should be provided in the new town hall.

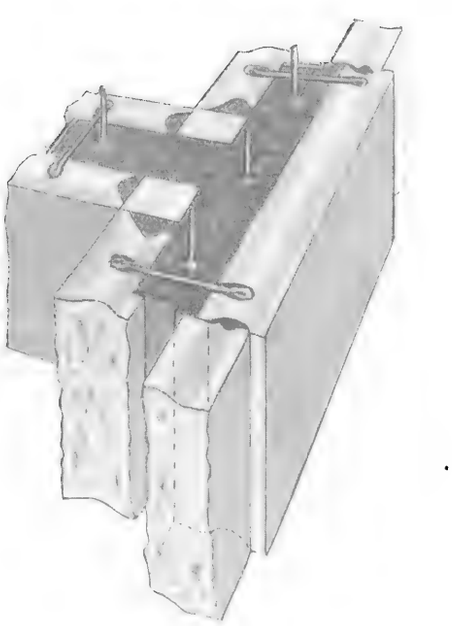
CARLISLE.—The Housing Committee have decided that as part of the housing programme for the next two years the offer of Messrs. J. Laing & Son, Ltd., to erect 300 two and three-roomed non-parlour houses during 1925 be accepted.—The Surveyor has also been instructed to invite tenders for the erection of additional houses in connection with the two-year programme.

Cheaper Building III.—The Winget System.

Winget, Ltd., have since their foundation in 1906 carried on continuous experiments in the making of different systems of concrete blocks, and the extensive use of their system for many large housing schemes have been satisfactorily carried out has made their name deservedly well known in the building world. Their registered office is Winget House, Grosvenor Gardens, S.W. The Winget system was employed in a large proportion of the camps and Government Housing schemes during the war, and in whole villages and model garden cities, and also for the Office of Works office building at Acton, costing £500,000. It has been used by the L.C.C. for their scheme at Becontree and in the direct labour scheme inaugurated by the Liverpool Corporation; at Belfast, Brighton, Walsall, Glasgow, Crayford, Chepstow, Balwarks, and many other places. At Wakefield, where the latest system of *in situ* pier and panel system is being employed, the complete unit can turn out enough blocks and slabs for the erection of one house per day, and the slabs can be laid entirely with unskilled labour, while the maximum proportion of unskilled and semi-skilled labour can be employed in the erection of the houses themselves. Non-parlour houses of 756 sq. feet super area and 868 sq. ft. super area, including electric light, drains, paths, etc., are being erected at an inclusive cost of £378 and £415 respectively, and parlour houses of a super area of 948 sq. ft. at a cost of £474.

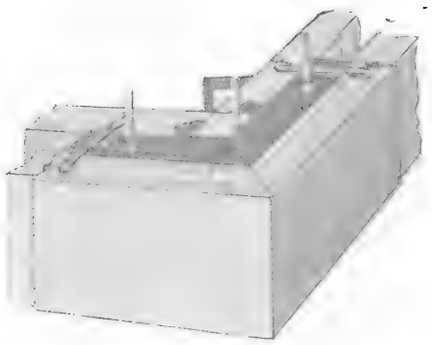
The system, of which there are several modifications, is divided into two main divisions, the *in situ* pier and interlocking panel system and the dry-laid block system.

Simplicity and economy are features of the *in situ* pier and interlocking panel system. Timber shuttering and moulds for the formation of piers which are about 3 ft. apart, or for forming and supporting slabs, are dispensed with; the slabs themselves, with the addition of narrow pugging slips, form the chambers to receive the wet concrete and reinforcing rods. The units used in construction are reduced to three, viz., firstly, interlocking concrete slabs of convenient length, width and thickness, preferably 36 in. by 9 in. by 3 in.; secondly, specially shaped cored angle blocks, suitable for both external and internal angles; and thirdly, 3-way T blocks for the junctions of cross and external walls. These are similar to the corner blocks except that they are T instead of L blocks.



T BLOCK, PIER AND PANEL SYSTEM.

Our illustrations show these angle blocks and the method of keeping the slabs apart by galvanised iron wire ties, these ties being nailed to the inner breeze slabs and fixed to the outer concrete blocks by being "run" with a small blob of plaster of Paris. Strips of asbestos



ANGLE BLOCK, PIER AND PANEL SYSTEM.

or compo board hold the blocks the right distance apart. Wet concrete is run in, when one or more courses are laid, each block having a "lamb's tongue joint" to ensure a perfect bind between the wet concrete and the slabs. The steel reinforcement is shown with the centre concrete. The edges of the slabs are alternately hollowed and rounded, at once forming a strong joint and securing perfect alignment.

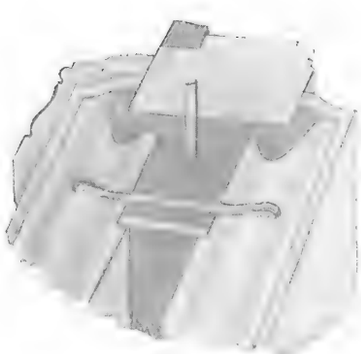
Pier and panel construction, while perfect from a constructional point of view, does not look satisfactory unless stuccoed or plastered, both necessitating skilled work. To obviate this, Winget, Ltd., have brought out a pier and interlocking panel system in which the piers are made to serve also as styles, the effect being carried out by the use of certain slabs as cross styles, the finished appearance being that of a panelled surface.

The constituent parts of this system are as follows:—

1. Outside slabs of hard concrete, 27 in. by 8¾ in. by 3 in. These are reversible and may be used as either panel or style slabs.
2. Inside slabs of clinker breeze, 36 in. by 9 in. by 3 in.
3. Angle blocks of hard concrete, 13½ in. by 13½ in. by 9 in., with centre arc holes and channels for *in situ* concrete and reinforcement.
4. Three-way or T blocks 18 in. by 9 in. by 9 in.
5. Pier blocks of hard concrete, 9 in. by 9 in. by 6 in.
6. Half-pier blocks of hard concrete for flanking door and window frames.
7. "Dry-laid" blocks, 18 in. by 9 in. by 4 in., for inside dividing walls.

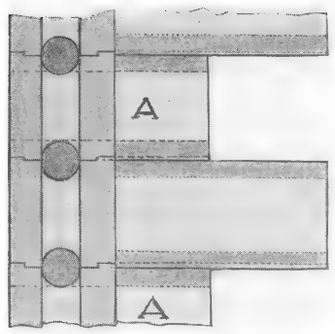
The corners of other blocks are laid dry, being so constructed that the inner clinker slabs can be fastened to them by wire ties and nails, as before described.

In all these systems the windows can either be cast concrete or wooden frames, as preferred by the designer.



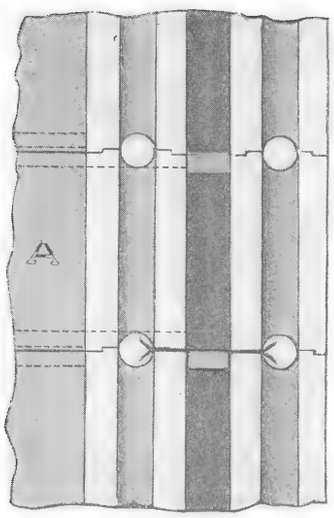
SHOWING THE FIXING OF FRAMES.

Where slabs are to be exposed to view as in the Pier and Panel system they can either be made with finished surfaces of different textures, or otherwise, if rougher slabs are made and used. The finish may then be applied after erection by going over the whole surface of the building with a coat of cement "slurry" brushed well into the surface of the blocks and all crevices with a "stock"



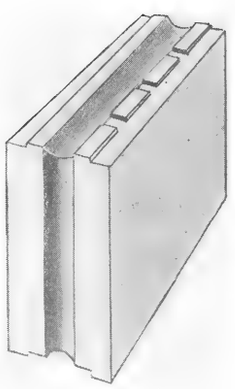
DRY-LAID SYSTEM. PLAN.

brush. This "slurry" may be tinted to any desired shade and may be mixed with a waterproofing compound Where the Pier and Panel system is employed the piers and styles may be treated with a darker shade or given a coat of gas tar. Window beads, sills, etc., are best "run in" in situ



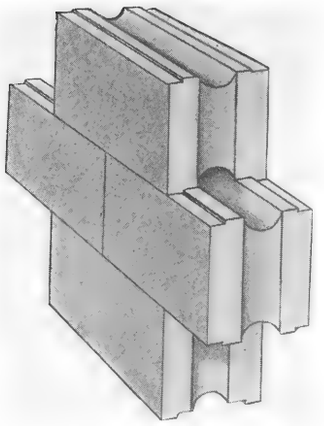
as the work proceeds in the same manner as the string courses. The extra cost of this is probably more than compensated by the saving in cost by the omission of stucco or rough cast.

In the dry-laid system the concrete blocks and slabs are laid dry either to a line or to suitable profiles, while



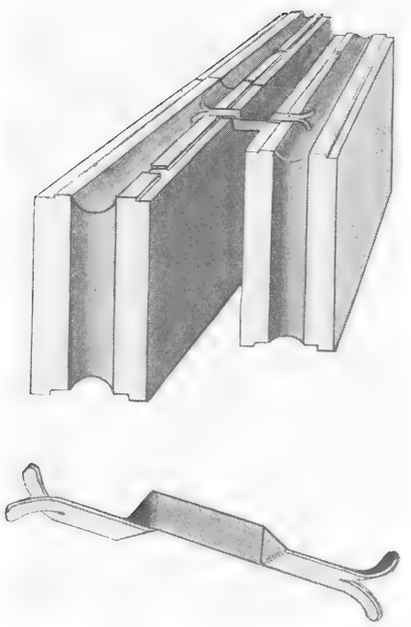
DRY-LAID SYSTEM. VIEW OF A SLAB.

liquid cement mortar grout is run in as the work proceeds in the grooves which surround the jointing surfaces of blocks and slabs. In addition the bed joints of blocks and slabs are rebated and recessed so as to interlock. Lateral movement is thus resisted and proper alignment



DRY-LAID SYSTEM. VIEW OF SLABS SHOWING CHANNELS FOR CEMENT.

secured until the grouting, which fills the joints, is poured in. This grouting runs down the vertical joints and along the horizontal joints. Continuous cavity walls, which many prefer, can be carried out where this system is employed.



DRY-LAID SYSTEM SLABS AND TIES FOR HOLLOW WALLS.

At the floor and roof levels 3 in. courses of "*in situ* concrete" are "run in" with suitable reinforcement round the building and connected with the angle reinforcements, and these courses serve as wall plates for floors and roof.

PORTSMOUTH.—The Camber and Dock Committee recommend granting a lease to the Redline Motor Spirit Co., Ltd., of a site at the Camber for the erection of a store at a rent of £280 per annum.—Having interviewed Mr. Stephen Ayling, F.R.I.B.A., as to the provision of public lairage and abattoir accommodation, the Health Committee have called for the preparation of a detailed scheme.

SWANSEA.—The Corporation Estates Committee are leasing a site at Sketty Avenue to the Glamorgan Presbytery, for the erection of a church.—Water mains are to be extended at a cost of £20,000.—Revised plans are to be prepared for the proposed central school.—The Electrical Engineer has prepared schemes for developments costing £100,000.—The Libraries Committee are considering a scheme for the erection of a public hall and institute at Fforestfach.—Details are being considered regarding proposals for branch libraries at Landore, Mumbles and Llansamlet.—Plans passed: 18 houses, Riversdale Road, for Mr. B. Beer; 27 houses, at Winchwen, for Swansea Vale Garden Village, Ltd.; 6 houses, Tycoch Estate, for Messrs. Jones Bros.; additions to English Congregational Chapel, for the Trustees; alterations, Old Prince Inn, Clyndu Street, for Mr. R. Watts.

Cottage for Mrs. Stoneham, King's Drive, Thames Ditton, Surrey.
G. Alan Fortescue, A.R.I.B.A., Archt.
13, George Street, Hanover Square,
London, W.
I. P. Leathart, delt.
1924.

COTTAGE, KING'S DRIVE, THAMES DITTON.
G. ALAN FORTESCUE, ARCHITECT.

"INK-PHOTO" WM BROWN & CO. LTD. LONDON, E.C.3.

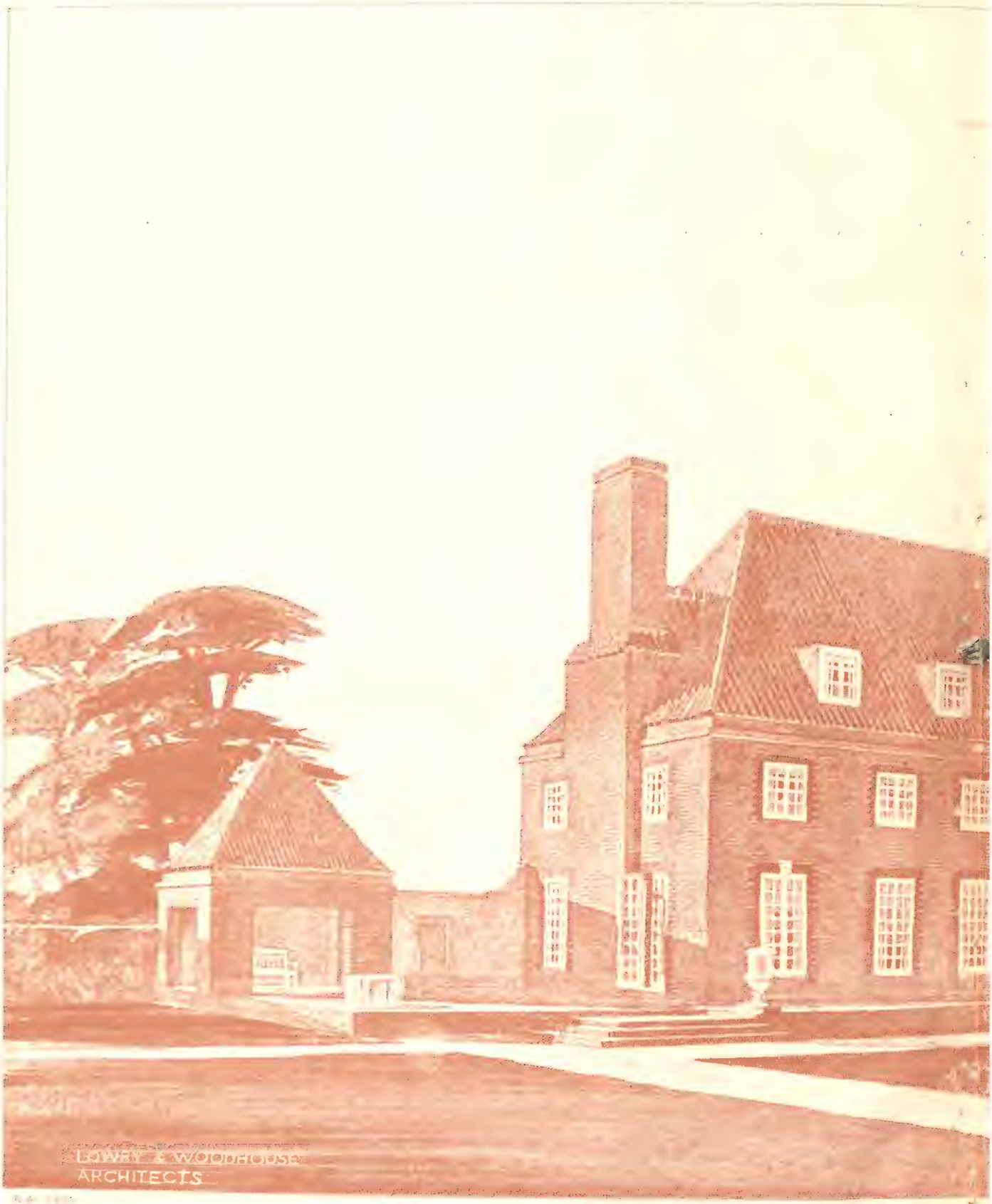
THE WHITE COTTAGE, CLAYGATE, SURREY.

G. ALAN FORTESCUE, ARCHITECT.

"INK-PHOTO" W& BROWN & CO. LTD. LONDON, E.C.3.

HOUSE AT PINNER, MIDDLESEX.

G. ALAN FORTESCUE, ARCHITECT.



PROPOSED HOUSE IN

LOWRY & WOODHOU

AVI
LIBR

IN HERTFORDSHIRE.

HOUSE, ARCHITECTS.

THE STAIRCASE, MANOR HOUSE, HACKNEY WICK.

H. S. GOODHART-RENDEL, ARCHITECT.

Leicester Building and Decorative Exhibition.

The first exhibition in Leicester devoted to the building trade was opened on Thursday, 16th inst., by the Mayor, Councillor J. M. Hubbard, J.P., in the Junior Training Hall, Aylestone Road.

This hall is an excellent building for the purpose, spacious, well lighted and ventilated, and the exhibits, for the most part, make a special appeal to all who are interested in the question of how to supply the pressing demand for houses, numerous methods of construction being demonstrated in a practical manner. Other exhibits display equipment and materials for houses and also for more important types of buildings, ranging from electric passenger and goods lifts to copper tubing for hot water and plumbing work. An important section of the exhibition is the varied display of plant to deal with concrete—crushers for clinker and other aggregates, elevators, concrete mixers, concrete block and tile-making machines, etc.

The City of Leicester Housing and Town Planning Committee have loaned maps, plans and layouts showing how they are dealing both with town planning and housing, which adds interest to the exhibition.

For carrying out housing schemes various methods exist for making use of the latest systems of house building, one being where specialist firms design a system and contract direct for the erection; another where material is supplied by the patentees to contractors and also where plant for producing concrete, concrete blocks and tiles is sold to the contractors, who use their own materials and labour.

The Triangular Construction Co., Ltd. (Stand 66–67, Row E), operates in each of these ways. Their triangular system of building construction, based on a triangular instead of the usual rectangular unit, consists of cavity blocks which are an extremely flexible method of construction. They have erected many buildings during the past four years and we hope to give some particulars of these in our next issue. The Trianco Portable Pressure machines, by which the blocks are made, are to be seen on their stand and also the Trianco Portable Roofing Tile machine, both of which have been sold to many contractors, who make with them the blocks and tiles *in situ* or otherwise.

The Yorkshire Hennebique Contracting Co., Ltd. (Stand 43, Row C), are showing examples of their system of reinforced construction for house building. Messrs. Henry Boot & Sons (London), Ltd. (Stand 44–45, Row C), a system of concrete walling of vertical hollow stanchions placed about 2 ft. 8 in. apart, panelled with 3 in. by 9 in. grooved and tongued concrete slabs.

The Damp-proof Concrete House Co., Ltd. (Stand 77–78, Row F), demonstrate the "Kent" system of wall construction, reinforced concrete piers, external and internal slabs between which distance blocks are fitted to regulate the width of the continuous air space being the main features.

Carolite Construction, Ltd. (Stand 50, Row D), have constructed on their patented system three sides of the ground floor walling of a house and the fireproof floor above. This method has been extensively used in Holland—over 400 houses are being constructed at the present time at The Hague. It consists of 9 in. walls, 50 per cent. void, made of screened clinker and cement. The process of erection consists firstly of metal forms held firmly in position by bolted wooden piers giving a continuous shuttering up to the first floor of one or many attached houses, the same principle being used for the floor centreing, a simple but effective support being given without poling. The concrete is then poured into the shuttering, no tamping being necessary, and the whole can be erected, it is claimed, by unskilled labour.

The Concrete Specialities (Stand 47–48, Row D) exhibit a two-roomed bungalow built with "Watchcrete" blocks, and roofed with "Watchcrete" tiles, which are composed of a special mixture of materials claimed to be damp-proof and to become stronger with age.

On Stand 62–63, Row E, is a section of cast iron houses (James A. Potter invention). This novel form of construction consists of 3 ft. cast iron rectangular plates with 3 in. flanges for bolting them together, placed side by side. They are bolted into a concrete foundation and are held rigid by a continuous 3 in. T iron at top, to which are bolted the next tier of plates and in a like manner the third tier, giving a height of nine feet between floor and ceiling. A 6 in. T iron is then used which gives 5½ in. bearing for the floor. The outside of the plates is plastered and on the inside wooden stays are placed in each sheet, forming a reinforcement on to which the laths are nailed for plastering. Air spaces are formed in each sheet. Window or door frames may be of iron or wood as desired.

In manufacturing and supplying plant of all kinds for dealing with concrete, Messrs. Winget, Ltd. (Stand 60, Row E), have had long and successful experience. They have selected for their exhibit the "Winget" No. 2 Pressure machine, in operation, constructed to turn out 60 concrete blocks or slabs per hour by hand operation, and the No. 2 "Westminster," specially designed for the smaller builder, with an output of 40 blocks or slabs per hour, and can be equally used for half-sizes with an output of 80 per hour. A 3 cubic ft. chain spade concrete mixer is shown, power-driven and specially designed for semi-wet concrete, but adaptable for wet concrete and other materials, also the "Warwick" 2½ cubic ft. wet concrete mixer. The "Winget" 20 ft. Portable Conveyor will handle bricks, blocks and most materials used in building and has proved a most successful labour-saving device.

The Conbloc Company (Stand 28–29, Row B) have an exhibition of the products made by the "Conbloc" machines, which include bricks, blocks, tiles, string-courses, etc., and everything required for the walls of an ordinary house. The bricks very closely resemble the ordinary red-faced burnt brick.

The "Liner" Patent Concrete Slab, Block, Lintel and Sill machine is on Stand 82, 83, 84 (Messrs. C. A. Peters, Ltd.).

Messrs. Goodwin, Barsley & Co., Ltd., have on their Stand 33, 34, 35, Row B, a 12 in. by 3 in. patent "Acme" Granulator with engine and screen mounted on one carriage, and a 12 in. "Acme Victor" concrete breaker, the open drum concrete mixer on wheels with engine, batch-measuring and loading hopper and water tank, capacity 3 to 4 cubic ft., and the "Springfield" hollow concrete block-making machine.

Frederick Parker shows concrete wipers with capacities of 7 and 4½ cubic feet. The "Monarch" granulator and "Monarch" light stone and brick breaker, and also the heavier type stonebreaker capable of dealing with materials of equal hardness to Leicestershire granite.

The Concrete Utilities Bureau, on Stand 57–58, Row E, demonstrate in how many directions cement plays an important part in modern construction and allied subjects. Examples of various forms of concrete blocks for walling and door frames, windows, fireplaces, roofing tiles, etc., balustrading, sundials and pergolas. Asbestos cement slates form part of a very interesting exhibit.

The Alexandra Paving Stone Co., Ltd. (Stand 41–42, Row C), have at their works a special branch for dealing with requirements of the building trade, and from it has selected for this exhibition a Gothic window as supplied to Baptist Chapel, Wembley, paving slabs, lintels and steps as supplied to the Leicester Corporation building schemes, door hoods, fence posts, pier caps, kerbs, etc.,coping as used for detritus tank. They also show how a garage can be constructed entirely of 2 in. slabs.

Novocretes, Ltd. (Stand 59, Row E), show the adaptability of "Novocrete" for various purposes in building. It is a new material made with cement and sawdust, specially treated, in place of the usual aggregates, and can be sawn, screwed, nailed and polished. It can be moulded into any shape or laid in the plastic state. It is used for slabs, hollow flooring blocks, tiles, also for paving slabs, road blocks, etc. It is claimed for "Novocrete" that it is impervious to moisture, a non-conductor, warm to the touch and soft to the tread.

The foregoing exhibits, which are mainly of a constructional character by no means exhaust the interest deserved. Messrs. R. A. Evans & Co. (Stand 51, Row D) have examples of their lift machinery, also passenger and lift cars with safety gears and safety gate attachments.

For decorative effects attention to Stand No. 31–32, Row B, will be well repaid, where the Silicate Paint Co., of Charlton, London, S.E., have two rooms treated with "Duresco," white "Duresco" No. 2 being used on the ceilings and cornices. The walls of one room are done in cream "Duresco" No. 86, and in the other room apple green "Duresco" M, with simple stencil design. Panels in various colours prove the fine effect that can be secured by "Duresco," while the woodwork throughout the exhibit is treated with "Silpaco" flat oil paint, also manufactured by this company.

The Walpamur Co., Ltd. (Stand 56, Row D), have divided their stand into three rooms to show different schemes of decorative treatment, whether by use of "Walpamur" water paint, or "Muromatte," and other of their various specialities.

Cuirass Products, Ltd. (Stand 23, Row B), show their anti-corrosive paints, waterproofing compound for roofs, etc.

Langley, London (Stand 64, Row E), have a well-designed pavilion on which to show how excellent is the effect of Marseilles roofing tiles, when fixed, and also of Beauvais roofing tiles. The Courtrai du Nord roofing tiles are to be seen also and all deserve the appreciation they have earned.

A good display of sanitary fittings is made by Messrs. Shanks & Co., Ltd. (Stand 54–55, Row D). Lavatory basins and w.c. suites in vitreous china deserve special attention, as does also the

"Aptus" bath with marble skirtings and risers. Bathroom accessories and sanitary fittings for all types of houses are of the style and quality looked for in the productions of this firm.

Mr. William Freer (Stand 54–55, Row D) has a working exhibit of the "Duplus" combined range and gas heated cylinder, also copper hot-water cylinder electrically heated, and shows the "Cookanheat" range specially adapted for small modern houses and giving a hot-water supply for heating from the specially constructed boiler. Other items shown include cast-lead rain water heads, pipes and roof coverings, and leaded lights are to be seen in process of manufacture.

Messrs. Mellowes & Co., Ltd. (Stand 61, Row E), occupy an island site and effectively display numerous examples of steel casements and sashes made by them; also their "Eclipse" patent glazing.

Messrs. Corts, Ltd., at Stand 40, Row C, have an excellent display of Dutch tile fireplaces and the very many examples shown emphasise the bautiful effects produced by the tints and texture of this ware in combination with the "Bell Fires." Grates in rustless steel, armour bright and cast bronze form a part of this exhibit. The "Smoothtop" gas cooker is now well known, and may be seen on this stand.

At an adjoining stand Messrs. Corts, Ltd., make a special display of "The Birnwell" combination boiler, one of the latest to gain success by good design, effectiveness and economy of fuel, and examples of "The Osborne," "The Trent," and "The Eagle" combination grates.

Messrs. C. A. Peters, Ltd., on Stand 82, 83, 84, show various kinds of wood treated, with "Carbolineum" wood preservative, testifying to the excellent effects produced by its use either alone or with a varnish finish as well as dry-rot and decay being prevented. "Peteroid" coloured waterproof cements, also aggregates and stuccoes, are an interesting section of this exhibit.

The Yorkshire Copper Works, Ltd. (Stand 53, Row D), have an instructive display of solid drawn (seamless) copper tubes, including tubes specially suited for hot water and domestic engineering and plumbing work, such as heating installations, hot water services, and from the use of which many advantages result.

The W. T. Nicholson and Clipper Co., Ltd. (Stand 85, Row D), have long enjoyed a good reputation for their various specialities, of which they are exhibiting the improved "Klincha" lever belt lacing machine, "Klincha" belt cutter, etc.

The Acme Patent Ladder Co. (Stand 18, Row A) show a variety of extension ladders, steps, etc.

The Diamond Tread Co., Ltd., show the application of their stair-treads. Messrs. Joseph Johnson & Co., Ltd., display the uses of the "Challenge" curtain runner and "Challenge" stair carpet clips. Messrs. Freer Furniture Co. specialise in producing high-grade mantelpieces.

An exhibition of students' work at the City of Leicester School of Arts and Crafts is a pleasant feature, and a mention must be made of the comprehensive displays made by the City's Electricity and Gas Departments.

Time and space do not permit of a morc detailed account of the exhibition in this issue, but a word of commendation is due to Mr. T. Percy Bentley for organising such an instructive and interesting exhibition, where nothing has been admitted that does not closely bear on building operations.

Building Materials.

The Minister of Health has appointed the following representatives of employers and operatives to serve on the Committee to advise and assist him in carrying out the scheme contemplated in the recent Act, particularly as regards the development and co-ordination of the supply of labour and materials for house building. The representatives nominated by employers in the industry are: A. Andrews, J. H. Barker, J. Carse, J. Clark, J. P. Cox, C. E. France, A. J. Forsdike, J. C. Gilchrist, F. G. Hodges, H. T. Holloway, E. W. King, H. Matthews, A. Melville, Wm. H. Nicholls, H. R. Selley, J. Somerville, E. J. Strange, A. G. White. The operatives' representatives are: T. Barron, G. Haines, H. M'Pherson, D. Merson, S. Sigsworth, G. Waddell, W. Turner, S. Taylor, A. G. Cameron, G. Hicks, W. Coles, R. Wilson, J. F. Armour, W. Cross, R. Coppock.

It is contemplated that representatives of the manufacturers and suppliers of building materials shall be added to the above committee. A separate committee representative of the manufacturers and suppliers of building materials is in process of formation, and provision will be made for co-ordinating the committees by means of a small joint committee.

Saving the Situation.

The debt we owe to time is often partially recognised, but not as fully as it should be. We go through an old village delighting in its softened outlines, the huddle of buildings, parts of them decayed or tumbling down, the bright colour of bits of brickwork, the incidence of tile, timber and thatch, while, above all, we unconsciously feel the conviction that generations of men have lived and worked and died, striven and enjoyed themselves, within the walls before our eyes. But if we imagine the same buildings crude and hard in their newness, frequently uncouth as they must have been and poor in design, if we divest ourselves of the fruits of our own imaginations, we should often feel that the wizardry of fancy rather than the logic of facts had governed our mental conclusions, and we should also feel that while our memories had lost delight our hope had been brought nearer.

For we require only hope and well directed effort to make the present an inheritance comparable to that which was left to us. More than this, the beauty of nature, like some priceless jewel, may be enhanced and not damaged by the new setting it is within our power to give it.

With order and prevision we neither need regret the growth of towns or of population. We have space enough for both and can yet leave great tracts of country beautified and not spoiled by the buildings needed.

There is no reason why a new England should not come into being fuller and richer in beauty and interest than that known by former generations, why we should not add to and not detract from the heritage of the past.

Even in the troublous times of Charles II., when trade languished and the abuses of bad government were rife, when the Dutch swept our commerce from the seas and sailed unchallenged up the Thames, a new capital city came into being, but now the sporadic scattering rather than the reasonable grouping of buildings is the tendency of the age. It is this sporadic scattering rather than the quality of the buildings themselves which is most at fault in the present time, and if we are to preserve beauty it is the reasonable grouping and disposition of buildings more even than the design of those buildings themselves which is of paramount importance. And, in view of the immense amount of development which goes on and the fact that most people have little time or inclination to think such problems out, it becomes very necessary that our authorities should control both town and regional planning in the interests both of the material and æsthetic needs of the community.

It is this control alone which can prevent the destruction of both present and future beauty and leave to future generations as full of delight as the past, though this can no longer be effected unconsciously. The small communities of the past, slow growing and concentrated in villages and small townships, were separated from one another by untouched country, country more or less inaccessible or inconvenient for building. When great merchants lived within the confines of the City of London and the Strand was open land separating Westminster from London, there was little reason to "bury oneself in the heart of the country," but rather both for safety and convenience to be close to town or village. When forests covered a great part of England and in those later years when the enclosure of commons and not their preservation was encouraged by the authorities, the "spoiling of the country" would have been an unmeaning phrase. Now conditions are reversed: the best sites for building are considered to be those which are most isolated, providing at the same time that reasonable means of access to them exist. When plague and fire had destroyed the capital city it was yet possible to create a finer and nobler London than the picturesque mass of slums which had existed before in which squalor was redeemed by an occasional building of greater importance or more ambitious purpose. So, too, to-day we can, if we choose, stem the tide of our difficulties and transform the face of town and country, but we can no longer do so without skilful and well thought out plans.

Year by year the fallacy of thinking that we can go on adding building to building without thinking of larger conceptions becomes more completely demonstrated to us. The evil is greater than any we were exposed to in past times, because our buildings are bigger and more permanent and because we are placing future generations in irons instead of confining them with bandages which may be broken.

And the fate of beautiful country districts disfigured by haphazard and unwise development calls emphatically for remedial measures in the interests of all.

This is, we believe, the greatest of all problems for architects to-day. We alone can diagnose the disease; we alone point out the remedy. It remains for us to do our best to influence the public mind and to bend its energies into the only direction in which real progress can be effected.

Correspondence

[*The Editor will not be responsible for the opinions expressed by Correspondents.*]

Museums and Art Galleries.

To the Editor of THE ARCHITECT.

DEAR SIR,—I read in the professional press that Manchester City authorities have invited architects in an open competition to submit designs for a new Museum and Art Gallery. The conditions have been most carefully prepared, and three well-known professional men have been appointed assessors. What I should like to enquire is for what purpose are art galleries, and more especially museums, erected. Vast numbers of men and women pass every year through the turnstiles at the Victoria and Albert Museum and wander round the galleries reading the catalogues and the neatly printed tablets on the various exhibits. At times students may be seen sketching various objects and figures. Near the entrance a stand displays a number of books on different collections and subjects. Post-cards of the various well-known objects in the galleries are also offered for sale. Albums can be inspected containing prints from negatives taken by the official photographer, and copies of these prints can be purchased at a very reasonable price. By obtaining a permit these photographic prints may be reproduced in any journal. The official photographer can be employed to take negatives, which are not in the already existing collection of official photographs, for a charge which is extremely reasonable. My question under the above circumstances would seem very uncalled for considering the many facilities that are offered. But whilst these facilities are undoubtedly very wide in a general sense, and might satisfy the general public, the individual who is making a close study and a minute research of any subject, which needs special knowledge and skill, does not receive much assistance. The artists and art directors who select the objects to be exhibited will readily admit that because a man was a skilled craftsman in wood is no reason to assume that he was equally clever in handling metal; and artists who are great water-colourists are not of a necessity successful in other media. It is therefore rather curious that these art directors should appoint an official photographer and consider him competent to take views with equal success of all subjects. To photograph a gilt piece of period furniture upholstered in brilliant colourings needs quite a different technical knowledge to taking a successful photograph of a beautiful marble object. In the world outside the museums there are photographers who devote their whole lives to the correct representation of architectural subjects, others are experts at taking photographs of paintings, and others study sculpture.

Apart from the authorities' rather narrow view on the question of photography, it appears to be very difficult to secure the removal of any object from its selected position, so as to enable the expert to examine and make a careful study from other aspects than the one selected by the authorities. In my opinion unlimited facilities should be granted to all who can prove that their studies are for a sincere and bona-fide purpose, which may possibly lead to a greater public knowledge of the subjects. The authorities who handle public money when they purchase rare objects of art might perhaps be respectfully reminded that whilst it is their duty to protect these objects with every care, it is also their duty to permit members of the public to inspect and examine their own property, so that the very first object in the acquisition of these works and specimens may be fulfilled. The mere possession by any nation of a collection of fine examples of works of art is of no great value unless those who desire to study and learn the beauties of the collection and by means of their writings and lectures transmit the fruits of their researches to the public, have easy access to these works and every encouragement and assistance from those in charge of the collections. Surely one serious student seeking facilities is of more real value to the nation than the fact that one thousand members of the public have passed through the galleries to relieve their general boredom of life by an inspection of the exhibits.—Yours faithfully, etc., etc.

AN EXPERT.

Specialists' Education.

To the Editor of THE ARCHITECT.

DEAR SIR,—The subject of Architectural Education has been brought before the profession in quite a number of well-written articles and letters, though I venture to hope that the points I desire to bring before your readers will be recognised as very vital and logically sound. I cannot recognise the subject as a complete unit. To me the study of architecture must be the final stage of a general education in Art. In my opinion the time to direct a student to study Architecture is when he exhibits the power to design in some form or other and not before, because without the faculty to design an architect is without the most essential features of his professional activity; in fact, as an architect he does not exist.

It appears to me altogether foolish to place a young man who has no very definite idea as to his future or his abilities into an architect's office or an architectural school. Architecture, Sculpture, Painting, Decorative Design, and Industrial Design are all fields wherein men and women can find careers which will not only give them joy, satisfaction and pleasure, but also the necessary monetary rewards which will enable them to live.

At the age of fourteen a young boy of my knowledge was sent to an art school because he had shown a liking for drawing. His parents had an idea that the only satisfactory occupation for anybody possessing a liking and talent for drawing was Architecture. In their eyes an artist was very little better than a vagrant. Architecture was something definite and offered a regular employment. The father interviewed the headmaster and in due course the young man studied ornamental forms from plaster casts, rendering his drawings first in outline then shading in pencil and wash. Floral subjects were studied in the same way. Perspective and geometry completed the first twelve months studies, later on modelling was also included. When the lad was sixteen he assisted an architect in drawing his full sized details, specially those containing ornamental forms, these duties lasted six months. Nothing was mentioned at his home about the ultimate aim of these studies. From the age of seventeen to nineteen the young man attended another art school and followed the regular course of study which included Building Construction and Architecture. When the young man reached the age of nineteen a great desire to design manifested itself and was expressed in the production of ornamental designs in many different styles and forms of treatment, naturalistic and conventional, the young man seemed utterly unable to follow the ordinary course of study. The father was informed of this state of things and very reluctantly consented to his son entering the Decorative Design School. The young man eventually became a successful technical designer and is earning quite a good income at the present time. Had the father placed his son in an architectural school at the very beginning, the chances are that he would never have shown any desire to design, but had the parent reasoned with the young man at the age of nineteen when the power for design manifested itself in such a decided way and had explained that architecture offered a very wide field and scope for ornamental expression, that architecture itself was almost entirely an expression based on the same principles that governed a perfect design, I think it is very probable that the profession would have gained a very clever architect.

Parents should be made to realise that there exist other fields of activity besides architecture for their children that are fond of drawing. And these young people should be given an opportunity for realising the vast possibilities that are offered to their talents before they made the final choice of a profession in any fixed direction.—Yours faithfully,

H. W. MARTIN-KAYE.

44, Doughty Street, W.C.1.

DARTFORD.—The Urban District Council are to obtain tenders for the erection of a further 28 houses.

WARWICK.—The Town Council have had tenders for the erection of 41 houses on the Emscote site, and recommend acceptance of the offer of Messrs. Standbridge & Parker to erect nine non-parlour type houses. Plans passed: Alterations, Seven Stars Hotel, Friars Street, for Messrs. Flower & Son, Ltd.; extensions to foundry, for Emscote Foundry Co., Ltd.

"Ladder Work."

Builders' men will tell you that a workman is not of much use on a building job unless he is a good "ladder-man." Bricklayers, tilers and slaters, plumbers and general labourers are naturally good ladder-men—they are brought up to it from their youth.

But it is not given to everybody who has to climb about buildings to be absolutely at home on a high and narrow scaffolding or at the top of a thirty-rung ladder, and this is a thorn in the flesh of many architects. We are not all of us blest with Brunel's iron nerve. Most of us have heard about the famous occasion when he visited Bristol to inspect the construction of the vast piers of Clifton Suspension Bridge, and, desiring to plumb a depth, walked out on an eleven-inch plank which was supported on terra firma by several hefty workmen. Arrived at the end of the plank, he dropped his plumb-line, entered his measurement in his book, turned and had a thorough look at the work from his perilous position in mid-air, and calmly retraced his steps to firm land again.

There are few architects or surveyors nowadays who would have the nerve to do this, and there are many who frankly dislike any kind of ladder work. The necessity for personal inspection, however, obliges them at times to climb to dizzy heights, where a false step would mean disaster. The fact that the average architect spends the greater part of his working hours at theoretical work on the drawing board is a hindrance rather than a help to him in this respect.

To a sensitive man, too, it is not very pleasant to feel that one's dislike of this climbing is obvious to workmen on the job. Their respect for the "archie-teck" is none too great as it is. There is the feeling that he is an unnecessary person, a theorist, who hinders rather than helps the real work which is done by the builder and his men. There is the old fatuous argument about his not being a "producer" of anything. The contempt of the practical man of the more ignorant type for the theorist will continue as long as the world lasts.

Some busy architects, whose continual brain-work has made them temperamental and nervy, find it hard to conceal their irritation both at the workmen's grins and covert remarks and at their own inability to become quite at home at this gymnastic portion of their work. I remember helping a well-known surveyor on a theodolite survey of a famous quarry some years ago. The quarrymen climbed about the face of the cliff like cats, leaving a dangling rope and scaling a narrow ledge a hundred feet from the ground for some distance to the next rope. The surveyor I have mentioned was unusually nervous of this sort of thing, and when he saw the men doing things like this he was compelled to turn his face away.

At first this led to much merriment at his expense. An occasional clod of earth "fell accidentally" on his hat, and pointed remarks were made when he passed a group of men. It was only when they got to know him better, and met him in the village tavern munching his sandwiches and drinking his cider, standing some of them "half-pints" and chatting over a pipe of baccy with them in his good-natured way, utterly devoid of "swank," that they evidently voted him one of the best, and let him cover his eyes and mutter expressions of horror to his heart's content without comment on their part.

They say that familiarity breeds contempt, and it is a fact that a great many builders' ladder-men have become so accustomed to their work that they take risks which make one shudder, hopping up ladders that are nothing like securely fixed, climbing about partly demolished walls where the foothold is doubtful, and so forth. It is not given to everyone to do such things, but at the same time ladder "nerves" can to some extent be conquered by determination. After all, the actual danger is largely one of imagination, if proper precautions are taken. To glance downwards when at a great height or ascending or descending a ladder is simply asking for an attack of giddiness. Conquest of nerves means conquest of the whole trouble.

Logically there is no difference between walking along an eleven-inch plank laid flat on the ground and walking the same plank at a height of fifty feet. In neither case is there any hand-hold, and the foot-space is the same anyway. The only difference is that on the ground one knows one can only fall one's length, while up in the air one knows that a false step will probably result in death or serious injury. There is also that inexplicable attraction towards danger, that is stronger in some natures than in others.

It is not a case of balancing, like Blondin and his tight-rope. That was a feat which could not be done, even on terra firma, without an immense amount of practice. But anyone should be able to walk a straight line between eleven-inch limits.

Mind conquers matter, undoubtedly, and architects who have much ladder work and dislike it would find a course of exercises in mind control would help them tremendously. There is really no reason why anyone should not emulate Brunel's feat, unless, of course, there is some pathological "kink" in his nerves, in which case he should never adopt the profession of architect or surveyor.

CHARLES H. CRAIK.

"The Architect" Fifty Years Ago.

OCTOBER 17, 1874.

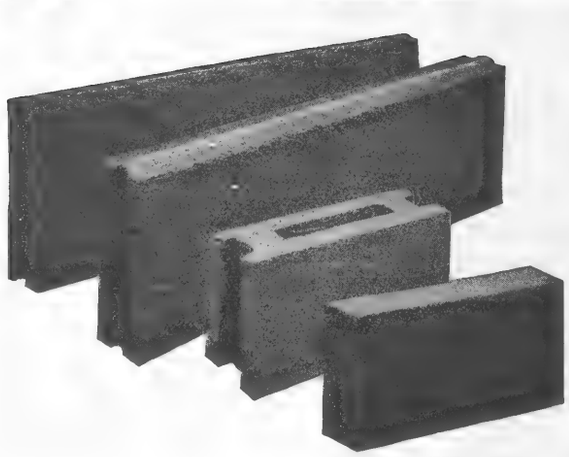
WORKING-MEN'S HOUSES.

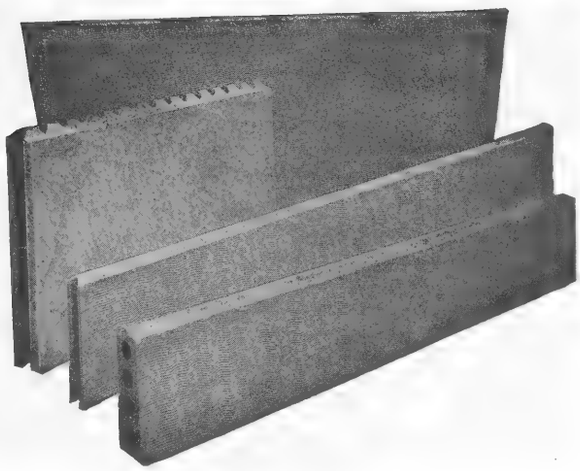
An extraordinary general meeting of the Artisans', Labourers', and General Dwellings Company (Limited) was held on the 8th inst., at the offices, Great College Street, Westminster. Dr. B. Langley presided. The secretary having read the notice convening the meeting, the chairman said that their operations would be confined strictly to the business of the meeting, which was to consider the expediency of increasing the capital of the company from £250,000 to £1,000,000. Of the 25,000 shares of £10 each, 24,000 shares had been issued, and nearly all the calls on them had been paid. The company had property in London, Manchester, Liverpool, and Birmingham, and the capital had been most judiciously expended. The directors did not contemplate issuing the whole of the new capital at once, they intended to issue £250,000 each opportunity to the shareholders as the money was required for the works in hand. They had purchased two new estates that would require nearly all the new capital. To complete the Shaftesbury estate, a considerable portion of which was already occupied, they would require £100,000. Then there was the Queen's Park estate, in the Harrow Road, that would require £600,000 to do all the necessary works, to lay out the roads, and to build the houses; there need be no fear but that the outlay would be very carefully made. The great problem had been solved as to constructing the houses and doing other works for a specified sum. The estate in the Harrow Road was very favourably situated, and was purchased for a sum about 33 per cent. below the cost of land in that district. It had a valuable frontage in the Harrow road, and was convenient to several railways that would give the occupiers easy communication with every part of the City. About £1,500 of the £10 shares had £5 each paid upon them. They were held by persons of limited means—working men—and they did not like to press them to pay up. There was, therefore, about £24,000 of capital now paid-up. He concluded by moving a resolution to the effect that the capital of the company be increased from £250,000 to £1,000,000.

Mr. Walton, a director, had great pleasure in seconding the resolution. He said that the whole of the company's building operations was carried on by judicious arrangements, every mode of economy was used, and from the energetic manner in which their secretary worked in collecting the details of every part of the work they could tell exactly what every first, second, or third class dwelling would cost, the quantities of bricks and other materials, the quantities of timber and kind required for the work, the plastering, and painting. The work was carried out on the co-operative system: they selected the best hands, they knew the value of every kind of work, so that the workmen earned good wages, and they had no occasion to call in an arbitrator to settle disputes, for they had none. With all this care, their outlay had been very productive, and he was reminded by the secretary that it was done at least 20 per cent. cheaper than any contractor could do it for them. The company had all the advantages of a superior system.

Other directors explained the eligibility of Queen's Park Estate, situate on a rising ground, a gravelly soil, easy of access both by omnibus and railway, and that it would increase greatly in value. It was stated that large shareholders were constantly increasing their holdings, and it was believed that there would be no difficulty in raising the new capital to complete the operations of the company on the Shaftesbury Park Estate, and to carry out those now contemplated on the Queen's Park Estate, in the Harrow Road. The resolution was carried unanimously.

CONCRETE BLOCKS "KING" PLASTER SLABS





Partitions, External Walls, Ceilings, Roofs, etc.

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J. A. KING & CO.

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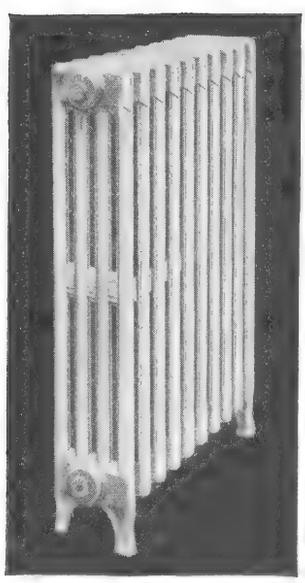
Bangor Wharf, Cumberland Road, BRISTOL



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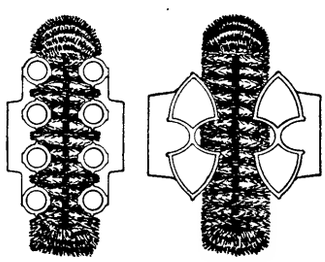
The diagram illustrates the more intimate contact of the brush with the surfaces of the Classic Radiator as compared with old types.



Tapered screw nipple construction: Ensures strength and prevents leaky joints.
Small water capacity: Reduces contents of system by one-half and gives rapid circulation and heating.
Compactness: Saves one-third floor space.
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Painting Materials and Their Application.—II.

By E. Clay Inston.

GRAINING.—The grainer is conservative, and, although some use poor materials, those who are specialists and rarely do ordinary painting can be relied upon to make a thoroughly good job.

Specify the type of graining required and state that a sample panel is to be executed for approval. Specify the varnishing as for staining, above.

FRENCH POLISHING.—State here also that a sample panel is to be executed for approval.

Specify "Thoroughly body-in, rub down, French polish and spirit off to a (full, half or hand rubbed) gloss. Brush polishing will not be allowed." In old work, the old polish should be thoroughly removed.

WAX POLISHING.—This is a most satisfactory treatment for oak, teak, and other woods in interior work. It can always be kept in good condition and does not need frequent renovation.

State that a panel is to be prepared for approval.

Specify "Carefully tone the whole of the (oak joinery) to an even colour to approval and wax polish with a thin prepared medium of white beeswax and genuine American turpentine, two coats, each coat carefully brushed to a hard surface and the final coat finished with soft rubbers to an approved finish."

It must, of course, be understood that the foregoing brief particulars are intended as a guide in preparing a Specification, and the specimen clauses will need amplification and variation to suit individual cases. The essentials are, however, given and the architect will find no difficulty in adapting them to his needs.

This short work would be incomplete and almost useless were I to omit reference to defects in painting, etc., and some indication as to the causes thereof.

Preparation, as I have before shown, is most important, and many defects which develop are directly due to careless or scamped preparatory labours.

ROPINESS.—Often known as "BRUSH MARKS," "SILKINESS" or "LINING." It is often apparent in the undercoating as well as in the finishing, and if it occurs in undercoats it cannot be successfully covered over. Sometimes it is due to workmanship, but first look for it in the material. Gauging the responsibility is a matter of experience.

When the material is at fault the source of the trouble may be due to—

(*a*) The use of paint which has been stored in a cold place.

(*b*) Paint which has been in stock for some time in uneven temperature and has consequently become "round" or "pudding like."

When due to workmanship the cause may be—

(*a*) Working the paint too much, i.e., after it has commenced to dry—most noticeable in undercoatings containing large proportions of turps or driers.

(*b*) Allowing the painted surface to become chilled during working.

(*c*) The addition of oil or turps to a ready mixed and otherwise well-balanced paint.

To make good.—If discovered before the paint, enamel or varnish has dried, have the whole of the defective work removed with turpentine and the surface again prepared for repainting.

If the work should be dry, have the surface cut down lightly with pumice in water or with medium waterproof glass paper, until a good surface is obtained.

Care should be taken, if the paint is being stored in a cold place, to have it slightly warmed to a temperature of about 70 degrees Fahr.

SISSING.—A condition in which the material does not flow out on the surface evenly, but leaves irregular patches and blotches which subsequent brushing does not cover.

This is always avoidable by careful workmanship, and is never due to defects in material.

There are several reasons—

(*a*) Grease on surface not thoroughly cleaned off.

(*b*) Sweat on the undercoat.

(*c*) Chilling.

(*d*) Fumes from certain chemicals such as ammonia, etc.

The remedy is to clean off the wet paint with turps and thoroughly reprepare the surface, ensuring that all grease is removed.

As a further precaution—and particularly in machine shops and places where the atmosphere is "oily," a coat of clearcole or ordinary size may be ordered. This will give a "grip" for the next coat. If not discovered until dry, have the work cut down with pumice or glass paper in water, and an additional coat applied.

BLISTERING is rarely due to defective paint. There are many causes, all of which may be avoided by good workmanship.

(*a*) Careless knotting, facing or priming.

(*b*) The careless use of filling material allowing moisture to remain in the faced work.

(*c*) The use of brushes washed in water and not thoroughly dried.

(*d*) Following on too quickly with the next coat.

(*e*) Sweat on the previous coat.

(*f*) Following on a surface which has become laden with moisture or rain and not allowed to thoroughly dry out.

(*g*) The use of inferior filling material.

(*h*) On metal work, the non-removal of scale.

The precautions in each of the above are obvious.

To make good, the blisters should be carefully cut out with a sharp knife, the edges carefully faced and the work prepared for re-execution.

BLOOMING.—Fog or fluorescent appearance in patches or over the whole work. Due to—

(*a*) Humid or smoky atmosphere indoors.

(*b*) Foggy weather.

(*c*) Working in badly ventilated places or where the air does not circulate freely, as often happens in public halls, chapels, churches, etc.

(*d*) Somewhat rarely, to the colouring agents in various paints.

Prevention of the first three is fairly obvious.

As to (*d*) however, the advice of the manufacturer should be sought with a view to avoiding colours which are hygroscopic. Some blues are troublesome in this respect, while blacks and certain shades of brown also affect the gloss. The difficulty is not insurmountable, and can be counteracted by a good chemist at the works.

As to remedies.—If due to any of the first three causes, careful washing of the affected parts with one of the following mixtures will result in improvement, but will not restore the full gloss which might have been originally expected.

(1) Equal parts of vinegar, raw linseed oil and methylated spirit.

(2) Equal parts of vinegar and clean water at about blood heat.

It is essential, however, that these mixtures should be thoroughly removed by sponging with tepid water.

SHRIVELLING, FALLING, FESTOONING, TEARS, ETC.—These all denote a similar condition, a running or "crinkling" of the surface.

Bad workmanship is to blame, or the presence of too much oil or turps.

With a ready mixed paint from a good manufacturer this latter is unlikely to happen unless the painting contractor or his workmen have added the oil or turps.

The principal causes are :—

(*a*) Unevenness of undercoats.

(*b*) Too much material used and insufficiently "laid off."

(*c*) Too much paint in the kettle, resulting in "full" brushes leaving patches of uneven thickness.

BRITANNIC HOUSE, E.C.2 (Moorgate Front).
Architect:
Sir E. L. Lutyens, R.A.

Steelwork Manufactured and Erected by
Redpath, Brown & Co. Ltd.

REDPATH, BROWN & CO. Ltd.

CONSTRUCTIONAL ENGINEERS,

3 LAURENCE POUNTNEY HILL, E.C.4

WORKS AND STOCKYARDS

LONDON	MANCHESTER	EDINBURGH	GLASGOW	BIRMINGHAM	NEWCASTLE-ON-TYNE
Riverside Works, East Greenwich, S.E.	Trafford Park.	St. Andrew Steel Works.	Westburn, Newton. Office: 19 Waterloo St.	Office: 47 Temple Row.	Office: Milburn House.

REGISTERED OFFICES: 2 St. Andrew Square, EDINBURGH.

(*d*) Working in too hot an atmosphere.

(*e*) Following too quickly over an insufficiently hard undercoat.

(*f*) Exposure of a heavy bodied enamel to cold draughts.

To make good.—If very bad the whole of the faulty work should be burnt or stripped off. If in small patches and experiment shows that a satisfactory job can be made, the offending portions, when hard enough, may be cut down to a good surface with pumice or glass paper in water and given another coat. It will frequently be found, however, that the latter expedient is not satisfactory.

GRITTINESS.—This is due to insufficient grinding or the presence of marble dust, silica, etc., as an extender of undue proportion.

Remedy.—Reject the material.

BITTINESS, SEEDINESS.—These are similar in appearance to the presence of grit but are due to other causes. A rough test to distinguish bittiness from grittiness is to grind a spot of paint between the thumbnails. If grit is present even minutely it will be immediately felt. If, however, this test shows the material to be smooth then the cause is one of the following:—

(*a*) Sudden chilling of the material in the painter's kettle.

(*b*) Broken skin in the material. (Kettles should always be emptied, even at meal times, to prevent skinning.)

(*c*) Dirty brushes.

(*d*) Using the dregs of a can of paint which has been some time in stock.

General News.

BEDFORD.—Plans passed: Additions, Primitive Methodist Chapel, Park Road, for Mr. Inskip; alterations, Crown Hotel, Britannia Road, for Messrs. Newlands; alterations, Midland Bank, High Street, for Messrs. Whinney & Hall, architects.

BRADFORD.—The Ministry of Health have now agreed to sanction a loan of £16,464 for the erection of warehouses for the Conditioning House Committee in Canal Road.—Sanction has been given to a loan of £5,500 for baths at West Bowling.—A bandstand is to be erected at Horton Park at a cost of £500.—The Mental Deficiency Committee has prepared a scheme for accommodation for 600 on the Westwood estate at an estimated cost of £179,000.—The reconstruction of the filtration works at Gilstead at a cost of £6,000 is proposed.—A water main is to be laid from Bradford Moor to Tong Street at a cost of £24,000.—A sub-station is to be erected at Four Lane Ends at a cost of £17,000.—Plans passed: 6 houses, Lister Road, for Mr. A. Dickinson; 8 houses, Beacon Lane, for Mrs. M. Wharrie; 6 houses, Norman Avenue, for Mr. J. H. Smith; 16 houses, Heaton Road, for Messrs. Patchett Bros.

EAST WORLINGTON.—Devon county architect has been asked to prepare estimates for the erection of new offices on a recently acquired site at the council school.

GLASGOW.—The city engineer has prepared plans for new baths and washhouses at Shettleston and tenders are to be invited.—A report on the Glasgow subway railway indicates that an expenditure of one million will be necessary and it is recommended that Parliamentary powers shall be sought for the scheme and application made for a grant.—A bandstand is to be erected in Bellahouston Park at a cost of £4,000. The Langside Hebrew Congregation is negotiating for a site in Cromwell Road for the erection of a synagogue.—A showroom is to be erected by the Gas Committee in Victoria Road at a cost of £2,600.—Tenders for houses at Hamilton Hill showed the estimated cost of 2 apartment houses to be £320 each; 3-apartment houses £372; 2-apartment flats, £350, and £397 each. The following tenders are recommended: Mason and brick work, Mr. J. Taylor, Clydebank, £52,168; joiner work, Mr. S. M. Stark, £33,764; slater work, Messrs. W. Walker & Sons, £7,241; plumber work, Messrs. Hugh Twaddle & Son, £27,550; plaster work, Mr. W. H. M'Kellar, £8,331, and glazier work, Mr. J. Wilson, £834.

HARWICH.—The borough surveyor is to proceed with the erection of tea rooms and lavatories on the beach at Dovercourt.—Mr. F. H. French, the borough engineer, is to prepare a town planning scheme.

KINGSBRIDGE (DEVON).—The Grammar School governors have under consideration the provision of laboratory accommodation.

LONDON.—It is proposed to accept the offer of £3,600 for the freehold of Nos. 158–160, Shaftesbury Avenue, made by the St. Stephens Development Co., Ltd., who have purchased property at the rear and propose developing the property as a whole.—Mr. F. G. Minter, who purchased the site of Nos. 60–64, Strand, now proposes to build on the site.—The Council have promised a building grant of £34,000 for the erection of the North Western Polytechnic.

LOWESTOFT.—Further serious coastal erosion has taken place and the borough surveyor estimates that a scheme for sea defence works will involve a cost of £10,000.—The borough surveyor is to prepare plans for 50 houses on the Beccles Road site.—A loan of £930 is to be sought for providing additional accommodation at the Church Road school.

OKEHAMPTON.—Devon county architect is to revise the plans for remodelling the council school, embodying an additional class room required by the Board of Education.

OSSETT.—The Board of Education have approved a site at Gawthorpe for the erection of an elementary school.—The West Riding Education Committee notify that they propose to proceed with the extensions to the Grammar School.

OTLEY.—The Urban District Council are to erect 48 more houses at Carr Green.

PLYMOUTH.—The Southern Railway Company are to erect cottages and flats for employees at the goods yard, Grenville Road.—Old Laira Road is to be improved at a cost of £13,333.—Tenders are to be invited for the extension of the wholesale meat market, work estimated to cost £7,000.—Fresh tenders are to be invited for the erection of 120 houses at North Prospect.—The G.W.R. employees propose a Utility Society scheme for 75 houses on the Beechfield site.—Eleven acres are to be purchased for an extension of the Mount Gold Hospital.—The Board of Education have sanctioned the erection of a school at a cost of £45,000.—Plans passed: 14 houses, Belair Road, for Mr. J. Deans; additions to 18, George Street, for Messrs. Boots, Ltd.; 24 houses, Lower Compton Road, for Mr. M. J. Finch; 14 houses, Thornbury Avenue, for Mr. F. Mussel; 6 houses, West Down Road, for Mr. J. Binmore; 6 houses, West Down Road, for Mr. F. Westcott; 6 houses, West Down Road, for Mr. W. A. Heath; 6 houses, Wolseley Road, for Mr. Ware.

PLYMPTON.—Devon county architect is to prepare a scheme for the erection of additional rooms at the council school.

SHREWSBURY.—Mr. John Vaughan, builder, Oswestry, who has the contract for 24 houses on the Sultan Road estate, has agreed to erect 46 others at a cost of £16,942.—Sir Chas. Nicholson, architect, has now prepared a scheme for the adaptation of the Castle as a Council chamber and museum at a cost of £3,500.

SOUTHWARK.—Messrs. J. Lyons & Co., Ltd., propose to rebuild Nos. 345 and 348 Walworth Road.

STRETFORD.—The Urban District Council now proposes to proceed with the fifth and last instalment of 56 houses on the Seymour site.

WAKEFIELD.—The architect is to discuss with the Ministry of Health plans for the erection of 12 houses with verandahs for consumptives.—The Yorkshire (West Riding) Tramways Company propose the erection of houses for employees.—Messrs. Randle & Co., Sunderland, have offered to erect 200 houses on the Wingate pier and panel system.—Plans passed: Warehouse, Denby Road, for Messrs. Newbald & Hartley; additions to Golden Lion, Kirkgate, for Mr. W. Wrigley; additions to St. John's Home, for Mr. W. Wrigley.

WARRINGTON.—The Corporation have approved a preliminary estate plan submitted by Messrs. R. & S. Smith for the lay-out of land adjoining Alder Lane for the erection of approximately 500 houses.—The Corporation have granted an application by Messrs. Whymans, Ltd., for permission to erect temporary wooden huts on vacant land adjoining their works to accommodate some of their workpeople.

WOKING.—The Urban District Council have prepared a scheme for the erection of 50 houses at an estimated cost of £30,683. Plans passed: Alterations, St. Austin's, for Trustees of Home of Ladies; warehouse and stores, West Street, for Mr. A. Lamdin; premises, Church Street, for Woking Co-operative Society.

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Legitimate Criticism.

In a so-called review of Professor Richardson's recent book on the Regional Architecture of the West of England, the reviewer writes as follows. We quote the whole in order to enter a protest against what is both unfair and very misleading.

> We would enter a plea for architectural books of popular interest being written in sensible English. It is of no use the authors of such urging that the meaning of expression in building be taught to "the people," when they themselves are open to the retort that the meaning of expression in words should be learned by the authors. We know what an architect would say of a serious architectural work being a medley of all the styles, but what will most readers say of this ?
>
> For nearly a hundred years vernacular building expression, which makes up the bulk of national architecture, especially in the country, has been suffering a partial eclipse ; experiments have been made, it is true, by architects to transplant shoots taken direct from old roots, but the ground has not been sufficiently prepared, the truth being that a vernacular growth, if it is to be healthy and vigorous in its flowering, needs the care of humble gardeners. Owing to the want of craftsmen, of bricklayers, masons, carpenters, and others skilled in their craft, men enamoured of their trade for the work's sake, architecture, the first and fairest of the Arts, has become a painted beauty, an odalisque to be bought or sold in the slave-market at the will of the purse-proud.
>
> And, again, "In the eighteenth century many new houses rose like exhalations in Devon and Cornwall, inspired from Bath and Bristol, with perhaps a leavening of a few London novelties "—and the style throughout is similarly loose.
>
> We hardly think the title "Regional Architecture" is supported by the illustrations in this volume. Much of the work shown can, indeed, be found in the Eastern counties of Norfolk and Suffolk, Lincoln and Cambridge. And pick out the names of the architects who executed the work. Sir John Vanbrugh, "with his portfolio of plans to do the King's bidding at Plymouth Dock" ; James Gibbs, "on his way to Antony House" ; Sir William Chambers and Robert Adam ; Smeaton, "with his schemes for the Eddystone and St. Ives" ; John Foulston ; Daniel Alexander, the architect of Princetown ; John Nash, Sir John Rennie, Professor Cockerell, Professor Donaldson, and Wightwick. All these names occur in the author's own pages. Certainly there are a few regional touches, but they are very slight, and occur only in the early work. In the later centuries, in the West of England, the influences in most of the important work are clearly marked—and they are not "local," but come, like so many of the Oriental antiques, from London Town.

Let us take the first criticism. Does the writer deny that in the last century there has been practically no vernacular expression, *i.e.*, that traditional craftsmanship which differentiated buildings in one locality from another is wholly or almost wholly extinct ? A door made in Devonshire and one in Yorkshire would, unless made to an architect's details, be finished with similar stock mouldings.

It was not so in the past when there were no stock mouldings, and when a great part of the details and design were relegated to the craftsman, and the author states this in terms that to us seem absolutely clear. Again, is it not entirely true that modern design, if it is design at all, is the outcome of the architect's work ? And is it not true that if our architectural expression is simply the outcome of the architect's direct instructions and details, it cannot be said to form a vernacular expression, but is only evidence of the superimposed will of a limited number of designers ? Professor Richardson's concluding lines that architecture is "bought and sold" at the will of of those who employ architects is literally true, whether the architect is a man of reputation or not.

In saying that in the eighteenth century houses arose like "exhalations" in Devon and Cornwall, the author may be employing a metaphor which is not of the happiest order. Still, mists do rise and so do houses, and we cannot say that the author's style is "loose" on such a slight ground.

But the critic who has such strong views on the subject of loose language gives himself away in his conclusion, "Much of the work shown can, indeed, be found in the Eastern counties of Norfolk and Suffolk, Lincoln and Cambridge." As the illustrations are those of buildings in Devon and Cornwall, how can it be asserted these buildings can be seen in the Eastern counties ? It must be remembered we are dealing with a critic who has a scholar's objection to loose language ! If he means that buildings of similar design might be found in the Eastern counties, would it not be better if he wrote in "sensible English" ?

It is true that many architects were employed who worked in other parts of England, but that does not affect the fact that, in an age when the whole burden of design did not fall on the architect, local craftsmanship differentiated results. This, we hold, is all that Professor Richardson would claim, and he would be the last to assert that vernacular expression would be so evident in the work of Gibbs, Chambers or Rennie as it would in that of some obscure Devonshire or Cornish craftsman.

What is it the critic really wants ? Does he think that the work of a London architect in Plymouth or Exeter has no fitting place in a book which treats of the architectural expression of a locality ? Or does he think it ridiculous that anyone should have the temerity to point out that buildings in different parts of England do differ in some of their characteristics ?

It is comparatively easy to follow old and well beaten tracks. We can readily and comfortably add to the numerous volumes which will give us learned criticisms and analyses of the merits of St. Paul's, or Somerset House, obtaining our information with ease, but it is harder to do as Professor Richardson has done, to examine the chief buildings of provincial towns and villages, most of which are unrecorded in books in two counties, and to give us a good selection of illustrations of them, together with a clear review of the place they fill in our national architecture.

The book is, we believe, the outcome of something like fifteen years of more or less continuous work and an achievement of patient compilation which we think those members of our own fraternity who have knowledge and appreciation will value, and it seems to us to be most ungenerous that anyone should on such a flimsy pretext write disparagingly of a book which will make many think and observe.

It is true that anyone who attempts the description

of the work of a period or the work of a given type will necessarily be inclined to slightly exaggerate its differences from that of other phases, and this it is possible that Professor Richardson may be guilty of doing.

But we should, in criticising, remember that the author is mainly concerned in giving a description of the more outstanding buildings in two counties which fall within a given period, and only ask ourselves how he has acquitted himself in a difficult task, and if we do so we believe there can be but one answer.

What the author says about the importance of studying local expression in building is surely sound. If we did so to a greater extent, the work of modern architects would gain and not lose. If, in addition, we would only lead people to take a pride and interest in local art and its expression in the crafts of building, we should not, it is true, have a new heaven and earth, but we should have helped to bring about a revolution of feeling which would end by our modern work regaining a great deal of the charm which we seem in a fair way to lose.

We do not want to see architecture made the subject of theories learnt in the schools and applied by enthusiastic specialists in different localities without variations, but the outcome of the wish of those engaged in the practice of architecture and the exercise of its component crafts to work together for the production of buildings required, having full regard to the fact that requirement and wants are varied by locality and many other factors.

The best and most lasting work will only be produced by those who are reasonably influenced by local tradition, and the fostering of such tradition is by no means a matter of slight importance.

Our Illustrations.

NOTRE DAME OF PARIS. From Drawings by Miss Ruth Cobb.

SELECTED DESIGN FOR RAFFLES COLLEGE, SINGAPORE. By Cyril A. Farey and Graham R. Dawbarn, Architects.

DESIGN FOR OFFICE BUILDING IN LONDON. By Oswald P. Milne and Paul Phipps, Architects.

Notre Dame of Paris.

By Ruth Cobb.

On an island in the middle of a wide river, there stood many ages ago, a village where lived a tribe of simple people. Probably for means of subsistence they fished in the river and felt safe in their home, surrounded by water, from the unfriendly attentions of other tribes. If they wished to cross to the mainland it would have been in rough canoes of their own making.

When Julius Cæsar came to Gaul he found a people known as the Parissi living on this island in the river Seine and he viewed the position with favour. The Romans built a road to the island and beyond and made a wooden bridge across the narrowest part of the river. The island they fortified and the town that arose there they called "Lutetia." This was the beginning of the Paris that we know to-day, although it has long spread beyond the limits of the island. There are now nine bridges connecting it with the rest of the city that has grown up on the river's banks, instead of the two wooden structures and ferries of Roman times. One of the bridges to-day, the Petit Pont, stands at the very spot of the first bridge over which the tribes marched to pay homage to Cæsar. Remains have been found on the island of a temple to Jupiter or Apollo which belongs to this date, and which must have stood on the spot where the great cathedral of Notre Dame rises to-day.

Little is known about the first Christian cathedral, that is said to have been building in the time of a king called Clovis, and its first stone to have been laid by Charlemagne, whose capital stood on the site of the city of the Romans. It was called "The Church of Our Lady of Paris," and the name was handed on when a cathedral was built near the same spot in the thirteenth century. It must have stood a little in front of the present building, for remains of it were discovered when the square in front of the cathedral was levelled some years ago.

This present cathedral of Notre Dame was begun in 1163, after the old church had been pulled down, and was finished in a hundred years, although in one sense it has not been completed, for the original intention was that the towers should have been surmounted by spires. These have never been built, and people to-day, accustomed to the straightness of the towers, doubt whether they would have been an improvement.

The choir was built first, in the Romanesque style of the day, then the nave in the Gothic style, which was just rising in its splendour. Through an accident part of the choir was burnt down and it was rebuilt in accordance with the rest of the building, so that the cathedral we see now almost entirely belongs to the thirteenth century. Perhaps the best view of the choir with its wonderful flying buttresses is from the farthest bank of the river on the right-hand side.

The front view of the cathedral is hardly as impressive as it must have been originally, for then it stood above a flight of thirteen steps leading up to the west doors with their wonderful carvings, but the surrounding ground has now been raised to the level of the doorways.

The interior, which, with its glorious stained glass rose windows, a blaze of colour, seems somewhat dark on entering, has been the scene of many dramatic episodes. One king of England, Henry VI, was here crowned King of France. Many of the French kings were married and crowned in the cathedral, including Napoleon Bonaparte. During the Revolution a decree was passed that the cathedral should be destroyed; this was fortunately rescinded, but for a time the building was converted into a Temple of Reason, and the famous statue of the "Virgin of Notre Dame," now back in its old surroundings, was replaced by a figure of Liberty. It was Napoleon who restored the cathedral to its original purpose.

Perhaps the most wonderful feeling of Paris of the past comes on ascending the tower of the cathedral. Standing by the balustrade decorated by marvellous grotesque figures of animals and goblins more than life size that are silently looking down on the scene below, Paris is seen to be stretched out as far as eye can reach. Below is the little island from which it has all grown and expanded. Notre Dame is no longer the centre of the city as it was in the middle ages. The heart of modern Paris lies more to the west, but to the student of the past this must always be the most important spot—the church on that small island in the river from which has sprung one of the great cities of modern times.

Notes and Comments.

The Election and Housing.

As an outcome of the election housing may be said once more to be in the melting pot. Should the Socialists be returned to power and office we may expect the Wheatley Scheme, absurd and impossible as it seems to us, to be the least of the burdens we shall be called upon to bear. The fact that Mr. Wheatley will find himself up against a stone wall will be made an argument for more drastic powers and more revolutionary methods. Should the Conservative party be returned we may expect the scrapping of the Wheatley Scheme and the reconstitution of that of Mr. Neville Chamberlain, with a few possible alterations. We shall also get a more or less exhaustive report on different and alternative methods of building and, unfortunately, as we think, a prolongation of rent control seems to have been accepted as an item in the proposals suggested.

Mr. Chamberlain, when attending the meeting of a building society, gave his warm support to the suggestion that subsidies should be paid—not to the builder—but to the purchaser's benefit society towards the payment of advances made by them. This seems to be a reasonable and good idea and would certainly eliminate the idea that the subsidy was simply a method of putting money in the builder's pocket. We believe the builder—who is so often spoken of as though he were a master criminal—would really be glad to have one of the charges against him finally laid to rest, while the net result of the transaction would remain the same. Instead of building at a cost of, say, £600 and getting £100 back, he would build at £700 and the purchaser would receive £100, which would make no difference to the builder, but, in view of public opinion, would tend to keep his character clear from the aspersion of profiteering, while it would certainly strengthen the hands of the building societies, which would be a real good.

Poured Houses.

The enthusiast who writes to the "Daily News" on the advantages of poured concrete houses overlooks a few important considerations. He says: "Those who live in poured houses say that they are absolutely dry, warm and draughtless in winter, and exceptionally cool in summer. These houses have an enormous advantage in the remarkable ease with which they may be cleaned. For one merely removes all the furniture from a room and turns a hose on the walls and ceilings, and the floors, which are sloped to allow the water to drain off and be led away through an outlet and trap."

We rather doubt whether this statement is entirely accurate, because experience shows that it is as important for comfort that the interior walls of a house should be absorbent as that its exterior should keep out wet. Apart from any question of appearance or cost we should all object to walls of plate glass because of the condensation which would take place on them, condensation which takes place on a plastered surface but gets away. We all know that a hardwood surface feels wet in certain atmospheric conditions, and it is unbelievable that people will be sufficiently satisfied with any artificial means of ventilation to dispense with open windows. Let us assume that a hose is turned on a room and the water drained away through a trap, the surfaces will still be wet, and assuming they are dried by a fire, vapour will be formed which will condense on any impervious surface, giving the effects of dampness. Houses have often been complained of as being wet simply on account of the condensation on hard plaster.

We do not say that poured concrete houses are for the reasons stated impossible or bad, but are pointing out that they, like other forms of construction, have very definite and distinct disadvantages.

Traffic Congestion.

We give a letter from Mr. Gangopadhyay, A.M.I.S.E., on a scheme proposed to remedy traffic congestion at crossings, of which we give three of the diagrams he sends us. The scheme consists in the construction of longitudinal barriers at crossings by which traffic would be forced to travel in a uniform direction. The longitudinal barriers are flanked at either end by cross barriers which enable traffic to change its direction, the space at the side of the cross barriers being narrowed down so as to equalise the amount of traffic passing into the centre space round the

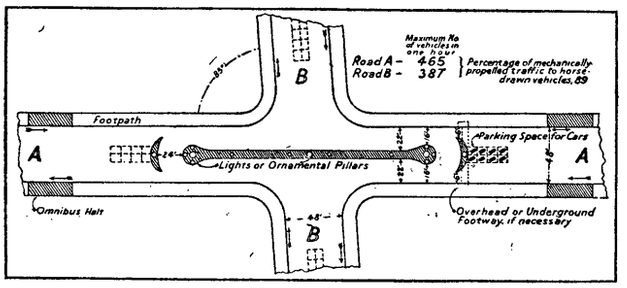


Fig. 1.—General plan of proposed arrangement at cross-roads to overcome traffic congestion. In this case two 48 ft. roads with 12 ft. footpaths intersect at 85 degrees.

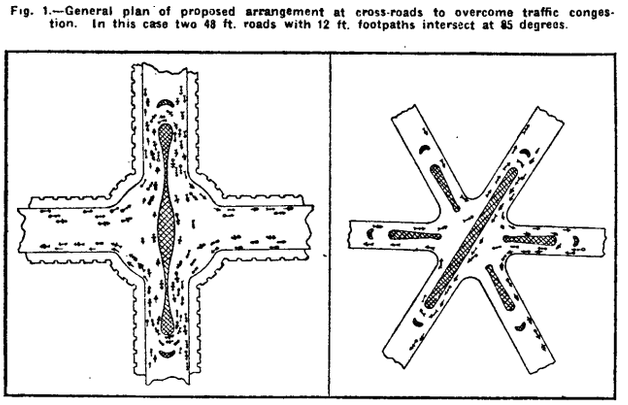


Fig. 2.—Sketch showing traffic flow consequent upon the installation of central platforms to overcome traffic congestion.

Fig. 3.—How the suggested platforms would be arranged to meet the requirements at the crossing of six roads.

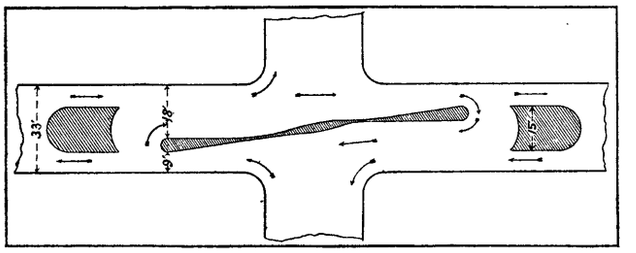


Fig. 4.—Sketch illustrating the adaptability of the suggested scheme to a roadway of only 33 ft. in width.

longitudinal barrier where the roadways converge. An advantage claimed is that by the use of this plan no great amount of alteration is necessitated. The platforms would, of course, be lighted by lamps.

The plan is an ingenious one and is, we understand, receiving favourable consideration, both by Continental authorities and in America. It would in actual practice mean that traffic was somewhat slowed down in the neighbourhood of important crossings, instead of being held up as at present, while it would undoubtedly add to the safety of pedestrians. It may be described as an automatic throttling valve, and the chief drawback would be that in slack periods it would a little add to the time it would take to make a journey, a very slight offset against the danger of the now frequent hold-ups which take place.

LLANDUDNO.—Plans passed: New bank premises, Mostyn Avenue, for Lloyd's Bank, Ltd.; 22 houses, Howard Road, for Messrs. Hughes, Savage and others.

BIRMINGHAM.—An elementary school is to be built in Piggott Street at a cost of £13,650.—Steward Street School is to be improved at a cost of £9,500.—Preliminary plans have been prepared for a secondary school for girls at Kings Norton, to cost £42,500.—Improvements at Cowper Street school, £4,800; alterations and plant, Summer Lane generating station, £104,000; erection of houses and purchase of sites, £1,000,000; new refuse works, £18,000.

A TYPICAL PROVENCAL VILLAGE.

The Custom of the Country.

A Plea for the Rudimentary, Simple Architecture of Old Provence.

By Francis Miltoun.

Those of a modern age will subscribe with difficulty to the sentimental quatraine of Sully-Prud'homme without mental reservation.

"*Je n'aime pas les maisons neuves,*
Leur visage est indifferent;
Les anciennes ont l'air de veuves
Qui se souviennent en pleurant."

Possibly he had come into close contact with that battery of modern Riviera villas and had got retrospective nostalagia. One can appreciate his mood in like circumstance. At that he could but have meant a house appropriate to its surroundings, which, after all, is a suitable enough text for any house builder. You may find myriad, of such off the beaten track in Provence, be they *cabanon* or *chateau*, the former considerably more than a mere hut the latter something more humanized than a castle.

A PROVENCAL RECONSTRUCTION.

Provencal architecture is a term of wide, indefinite scope —domestic, civic, military and religious, all are represented. The essential distinctive elements are the same—stone construction, either cut-stone or cement-stuccoed rubble, with tiles and terra cotta for roof and floors. Beams for the most part are hidden and wood trim generally absent. Such are the characteristics which the modern builder of Riviera villas has ignored, neglected or bastardized.

The frontiers of Provencal architecture, as we are justified in so terming it, follow virtually the line of the delimitation of the growth of the olive, doubtless of little signification but a curious analogy nevertheless. Arthur Young, in his French travels during the latter part of the eighteenth century, more or less unconsciously intimated the same thing. Even beyond Nimes, which practically marks the western limit of what is popularly known as "Roman France," from which influence Provencal architecture may have derived its chief inspiration, the same type of domestic and civic architecture is found as east of the Rhône. The Chateau d'Argilliers, near Perpignan, confirms this, though La Loge, the Citadelle and the Porte Notre Dame of Perpignan's old ramparts are manifestly of another race.

This dissertation claims not to be profound, indeed is based only on the personal observations born of many years of short-cutting through side streets and rambling over by-roads and seeing for oneself some of the minor things that matter, to the neglect, it is to be feared, of the many well-advertised sights and scenes which winter birds of passage in south-bound cars know so well. One can speak, however, only in generalities, adding simply the qualification which all observers who write down their impressions ought to add, "it seems to me."

There are hundreds of old walled farms and houses in Provence that have all the elements of commodity and suitability to purpose, some even elegance, which might well be taken as models of what a modern *maison d'agrement*

in this sunlit land should be. It is difficult to be precise as to just what their charm may be; probably it is a combination of properties that go well in the particular setting which surrounds them, reverting once again to fundamentals. As I pointed out in a previous article in these pages, this is just what so many modern Riviera villas utterly lack, failing as often as they do to satisfy a logical local conception.

It is the juxtaposition of non-egregious elements that makes up the pleasing ensemble. A Swiss chalet is obviously out of place with its jig-sawn eave drops overhanging an olive grove or an orange orchard. A single storey, or a storey and a half, elongated *cabanon*, with its heavy, overhung, almost flat, tiled roof, its diminutive windows (generally none at all on the north façade) and its solid shutters, to keep out the summer heats of the ten months of the year's fine weather and the two months of blustering mistral, are more suitable to conditions of life in the South of France than glazed verandahs and steam-heated apartments for three months and the house closed tight the rest of the year.

Many a ruined farmhouse, convent, monastery, manoir or chateau of the region has all the possibilities imaginable for transformation into something livable and lovable. If bareness is apparent in many cases, and walls within and without are often white or but faintly tinted, it is because adjacent local colour makes up for the lack and contrast gains thereby. If rooms are often exaggeratedly spacious, again they are often but mere cubicles. The straight line usually prevails, not in ugly proportion but always fairly lengthy. The effect is good, belying Byron's

"Spacious chambers joined
By no quite lawful marriage of the arts."

There may be lacking a profusion of decorative accessory but a certain simple grandeur more than makes up for the omission. Chimney pots sprangling over a northern roof-top may be picturesque if not exactly decorative, but the solid, square, single chimney amidships of the Provencal roof of tiles is more coherent.

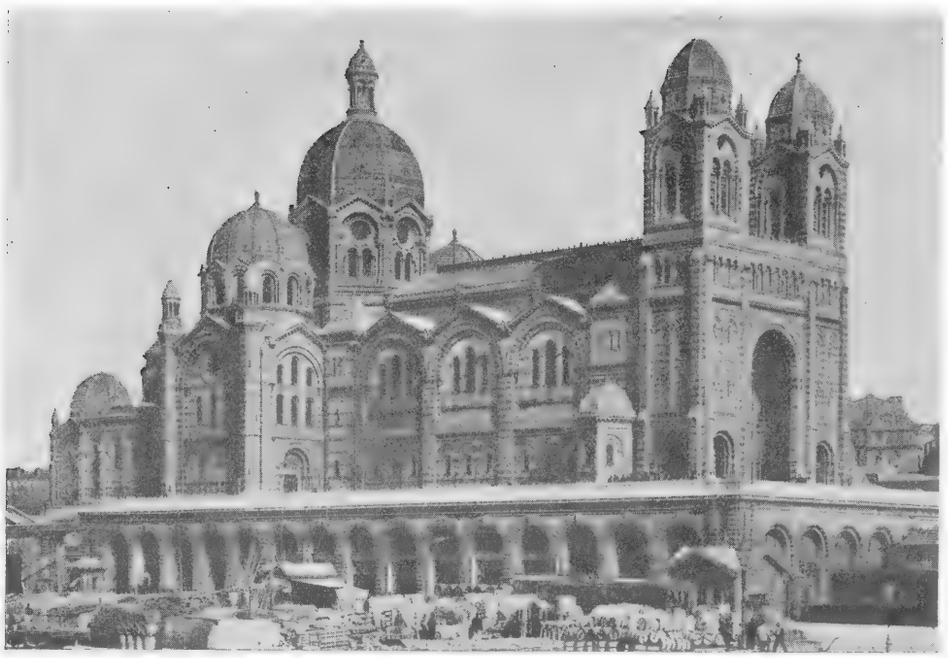
The general effect resembles nothing so much as the towered, heavy-roofed castles and houses with which Albrecht Durer peopled his imaginative drawings, which is a curious similitude, but one to be noted.

Inappropriateness is but another word for ugliness, too often the fault of the modern builder in France. Picturesqueness and commodity should be as compatible as a picture and its frame. Conditions in general may be much the same elsewhere, but when the Frenchman starts out on a campaign of modernity he runs so wild that few catch up with him. Endurance has its limit. Reaction, even a step backward, is the next stage.

There is no such body in France for the guardianship of beauty as the Royal Institute of British Architects in England. For this reason one has to hunt out natural and artificial beauties for himself, and to do so get away from the madding crowd and what has come in its train. The big Paris shops, with their mail catalogue depart-

A TYPICAL VILLA.

CONVENT-LIKE CLOISTER OF AN AMBITIOUS COUNTRY HOUSE.



THE CATHEDRAL AT MARSEILLES.

ments, are taking the indigenous beauty out of the dress of the habitant of the old French provinces, and the general furnishers are dotting the French countryside with striped lawn umbrellas and paris-green garden benches where, in Provence at least, the mulberry and the plane tree should furnish the welcome shade as they have since eternity began, as even a primitive locally made *chaise-longue* or an oaken bench or settle beside the door should serve as it served a former generation with all they needed or thought they needed.

Over Provence ran the trail of the Roman builder—the evidences of his art have never been eliminated, nor were they sought to be though Provencal architecture *per se* is no more distinctly Roman than it is distinctly or even vaguely French, or Gothic or Renaissance. If you can see it that way it is perhaps a blend of the first-named, where much has been sunk without trace. For the most part that with which we are concerned is not of to-day but of yesterday.

MONUMENTAL FOUNTAIN AT AIX.

Had the inspired model been adhered to by the modern builder hereabouts, whether dealing with the Riviera villa, the suburban Toulon mansion, the Marseilles apartment house or Cannebière shop-front or bank-building façade, the general effect would be less incongruous, less ludicrous. Modernity calls for many and varied accessories of life but at their best, and worst, they can, and should, be symmetrically and appropriately incorporated in the fabric, as the fabric itself should be in comport with its surroundings.

From the height of Notre Dame de la Garde at Marseilles a dozen years ago one might note on the surrounding distant hillsides square, little red-roofed houses blending with the greenish-yellowish-brown landscape as though they were woven in the warp. To-day, by the elimination of the modern horrors built in the valley of the Huveaune out of the debris of Madame de Sevignes Chateau de al Belle Ombre, these spots of colour still punctuate the landscape with something which is indigenous and not an interpolation, something which is not the least suggestive of a stage-setting as are the built-up suburbs of Nice and Cannes and as Antibes is in danger of becoming within the next very few years.

Allauch, Fuveau, Gardanne and the hillsides surrounding Aix-en-Provence all possess this same adorable cachet, the blending of artificiality with nature which was the success of the Provencal builder of old and would be to-day if he would but forget or ignore kinema-architecture and that born of the schools of Vienna and Munich. When it comes to Aix itself Provencal town and country architecture reaches its apogee. A city of fountains, monuments and noble residences of two and three centuries gone by, the ensemble tainted only by the modern, ridiculous rococo "casino," a name now given in France to anything whose functions run from a music-hall to a bathing pavilion.

[*To be continued.*]

The Cemetery Committee of the St. Pancras Borough Council recommends that monumental masons having experience in the construction and laying out of war memorials be invited to submit designs and tenders for the supply and erection of a monument for the war memorial site at the Council's cemetery at Finchley.

St. Pancras.—Euston Road is to be widened near Endsleigh Gardens at a cost of £14,000.

Cheaper Building IV: The Trianco System.

POLICE TRAINING ESTABLISHMENT, EAST MOLESEY. Dixon & Butler, Architects.

The Triangular Construction Co., Ltd., of Imber Court, East Molesey, Surrey, have invented and patented a system of concrete block construction under the name of the "Trianco" system, which is now being very largely employed in important works. The company, which has been working for more than five years, has long outgrown the experimental stage, and its maitest merits and advantages are shown by the fact that over half a million pounds worth of building has been carried out by it directly, while the machines sold within the last few years to outside contractors would probably raise the sum of the output to three or four times the amount mentioned.

The two outstanding points about the "Trianco" system are, firstly, that the machine by which the blocks are made makes possible the production of wet concrete blocks in which the cement is perfectly hydrated. The makers claim that in most concrete block systems the semi-dry process has to be employed, as the blocks cannot otherwise be extracted from the moulds. Under the two systems the cost of a block of 4 in. by 9 in. by 18 in. may be said to be:

Semi-dry.

	d.
Clinker aggregate	1·07
Cement	2·14
Labour	·63
	3·84

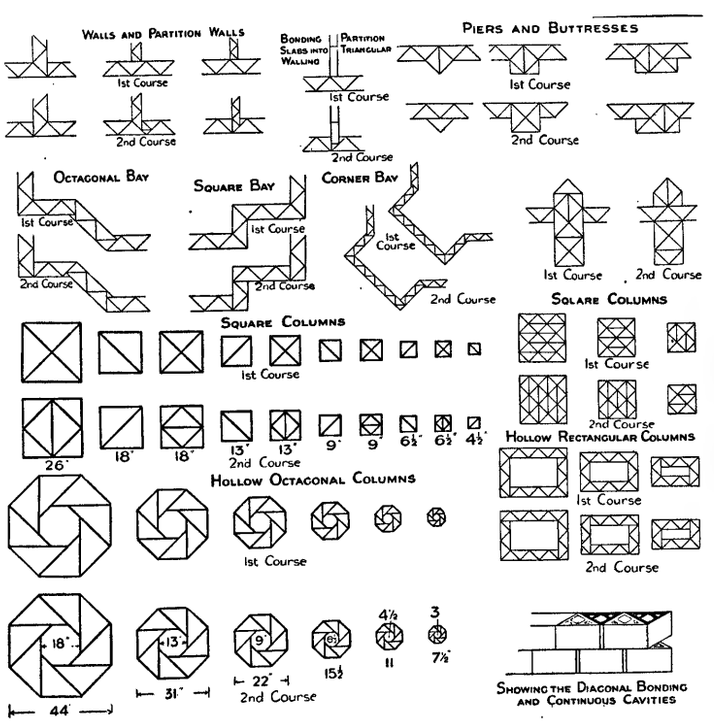
Trianco Process, same block.

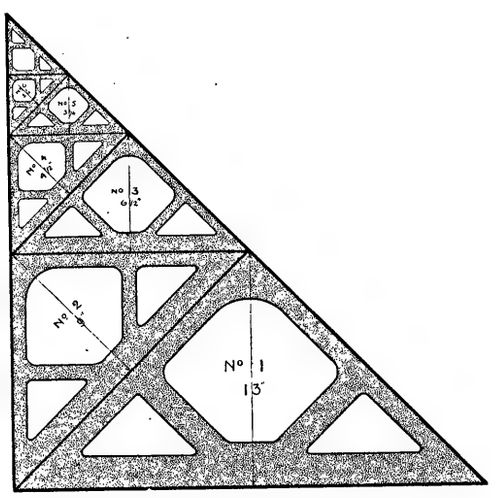
	d.
Clinker aggregate	1·17
Cement	1·07
Labour	·63
	2·87

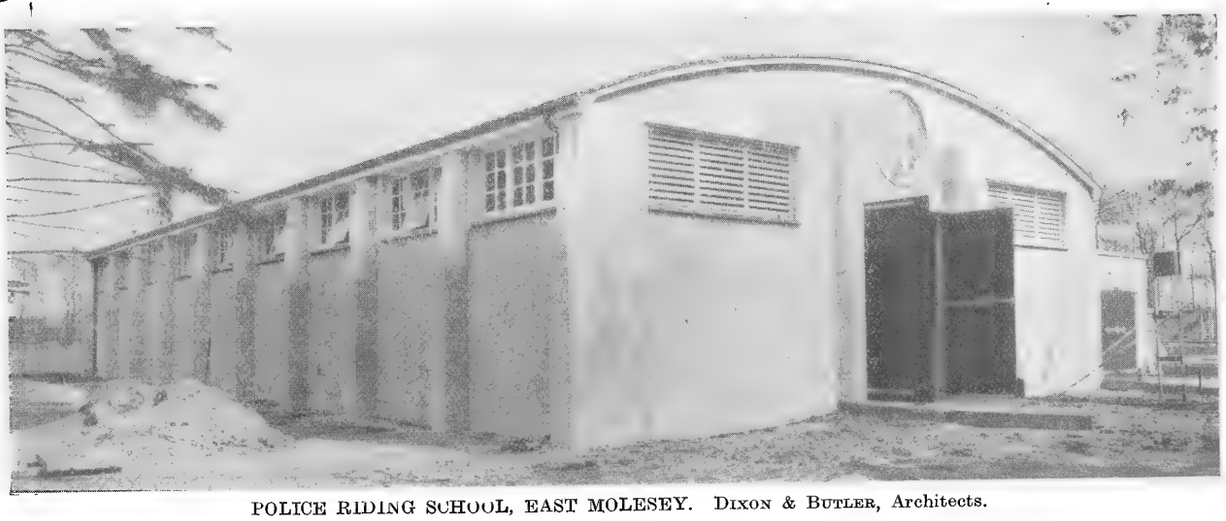
Thus a saving of 1d. a block is effected, which, on an output of 500 blocks a day (which can be exceeded) represents £2 a day, which would pay for the cost of a machine in less than 3 months.

The machine, which we illustrate, is extremely simple, pressure being applied on the block at top and bottom simultaneously. A pressure of 10 or 15 tons can be applied with ease. By the use of different moulds the triangular and other blocks used in the system can be made, but the great merit of the machine is its perfect adaptation for the employment of wet concrete, which ensures the best results at the lowest cost.

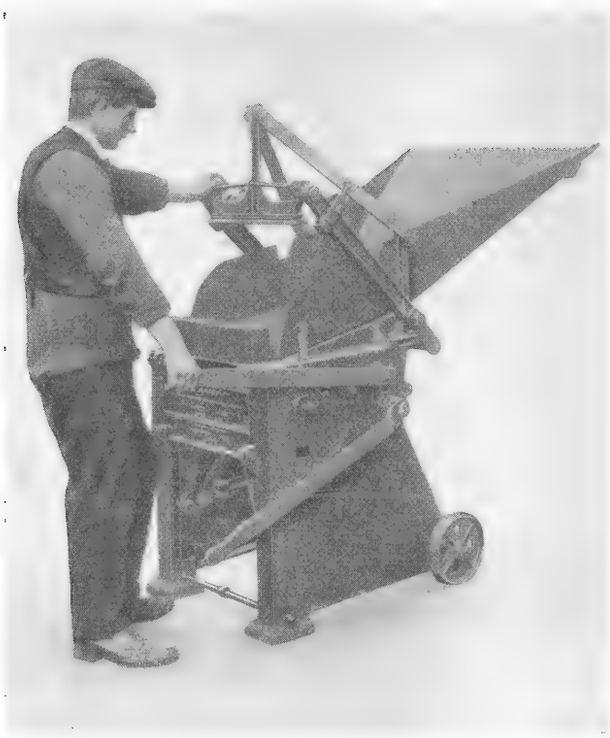
The second point about the Trianco system is the shape of the block, which forms a right-angled triangle, with a large square perforation flanked by two smaller triangular ones. The blocks are made in several sizes, and to conform to the standards of local by-laws these sizes are brick dimensions. Thus, of the two most general sizes used, the larger gives a 14 in. wall, the cross dimension of the block, and the smaller one a 9 in. wall. An ordinary wall is formed of an outer series of concrete blocks touching at the outer angles, and an inner range of clinker blocks of the same section and dimensions dovetailing in with them.







POLICE RIDING SCHOOL, EAST MOLESEY. Dixon & Butler, Architects.



THE TRIANCO BLOCK-MAKING MACHINE.

A broad cement joint, about 1½ in. wide, is formed at the point of junction of the outer blocks, this joint being about 2 in. deep, owing to the fact that the points of the triangular blocks are cut off. Each course breaks joint with the one over and under it, a perfect bond being produced. The cavities register with one another, forming vertical channels throughout the wall. In cases where reinforcement is required the reinforcing rods are taken down the smaller channels in the blocks and run in with cement. Angles, bays, buttresses and other architectural features can, as shown in the diagram we give, be readily formed with these blocks, which also build up conveniently into square and octagonal columns. It would seem impossible to devise a form of block at once so simple and so widely adaptable to different building requirements. At the floor levels the triangular blocks are dispensed with and outer rectangular blocks substituted with clinker blocks between the ends of joists on the interior face of the wall. Normally the blocks are made to run in 1 ft. heights, but these heights can be varied There is no reason why they should be cemented or roughcast. As some of the illustrations we give show, the appearance of buildings is similar to that of those in which stone is employed, and all that is required for appearance sake is courses of varied height.

The Triangular Concrete Company also make a portable tile-making machine, by the use of which concrete tiles of any approved colour can be made on the site of a building at a cost of less than £2 10s. a thousand.

It is calculated that by the use of the "Trianco" system a saving in cost of 20 per cent., or even more, is effected, combined with much greater speed, and it is a remarkable testimony to its efficiency that no complaints of damp walls have ever been made where the system has been employed. The ordinary flat breeze slabs for partitions are made by the same machines.

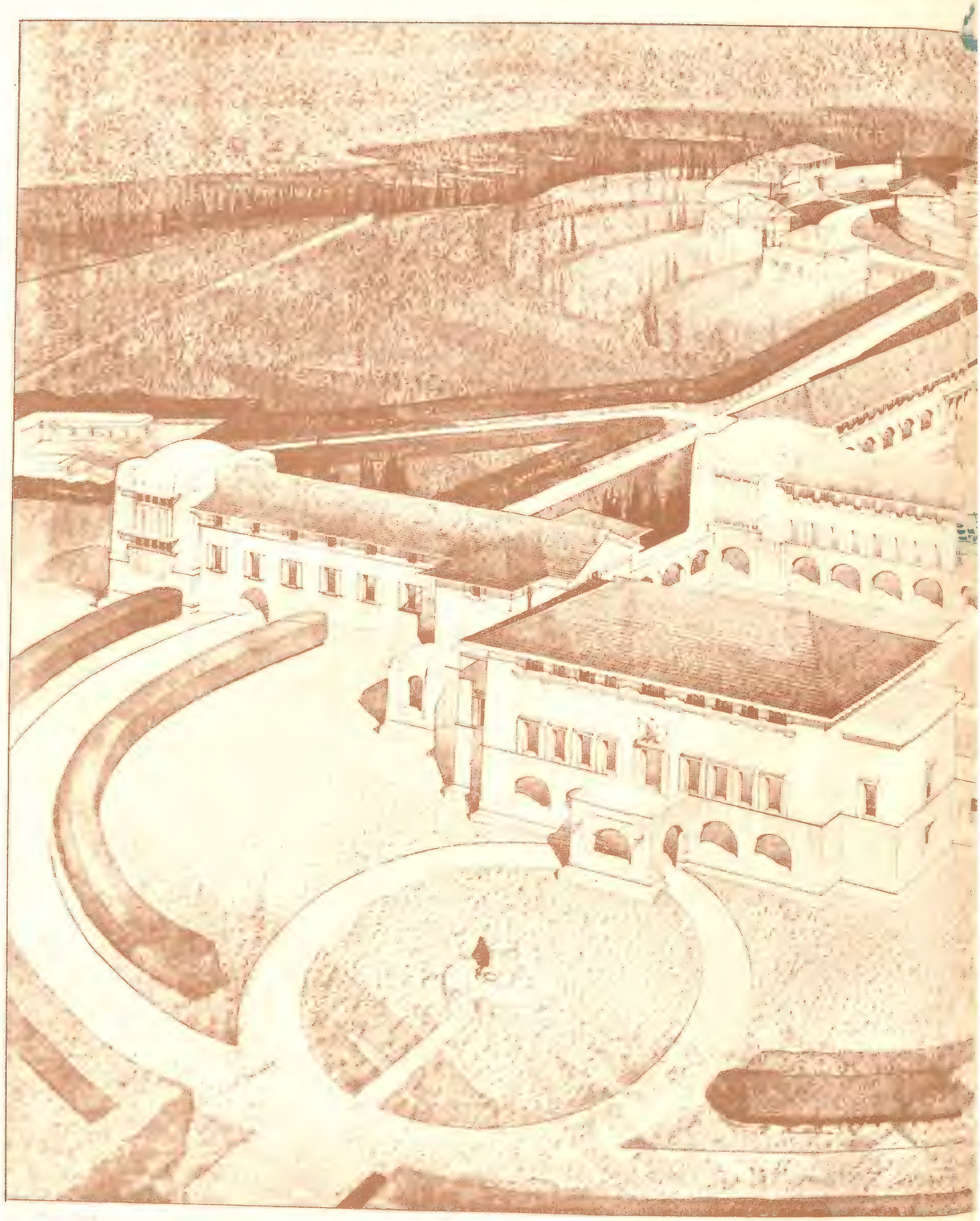
COUNTY HALL ANNEXE, KINGSTON-ON-THAMES. Jarvis & Richards, Architects.

DESIGN FOR OFFICE BUILDING IN LONDON.

R.A. 1924.

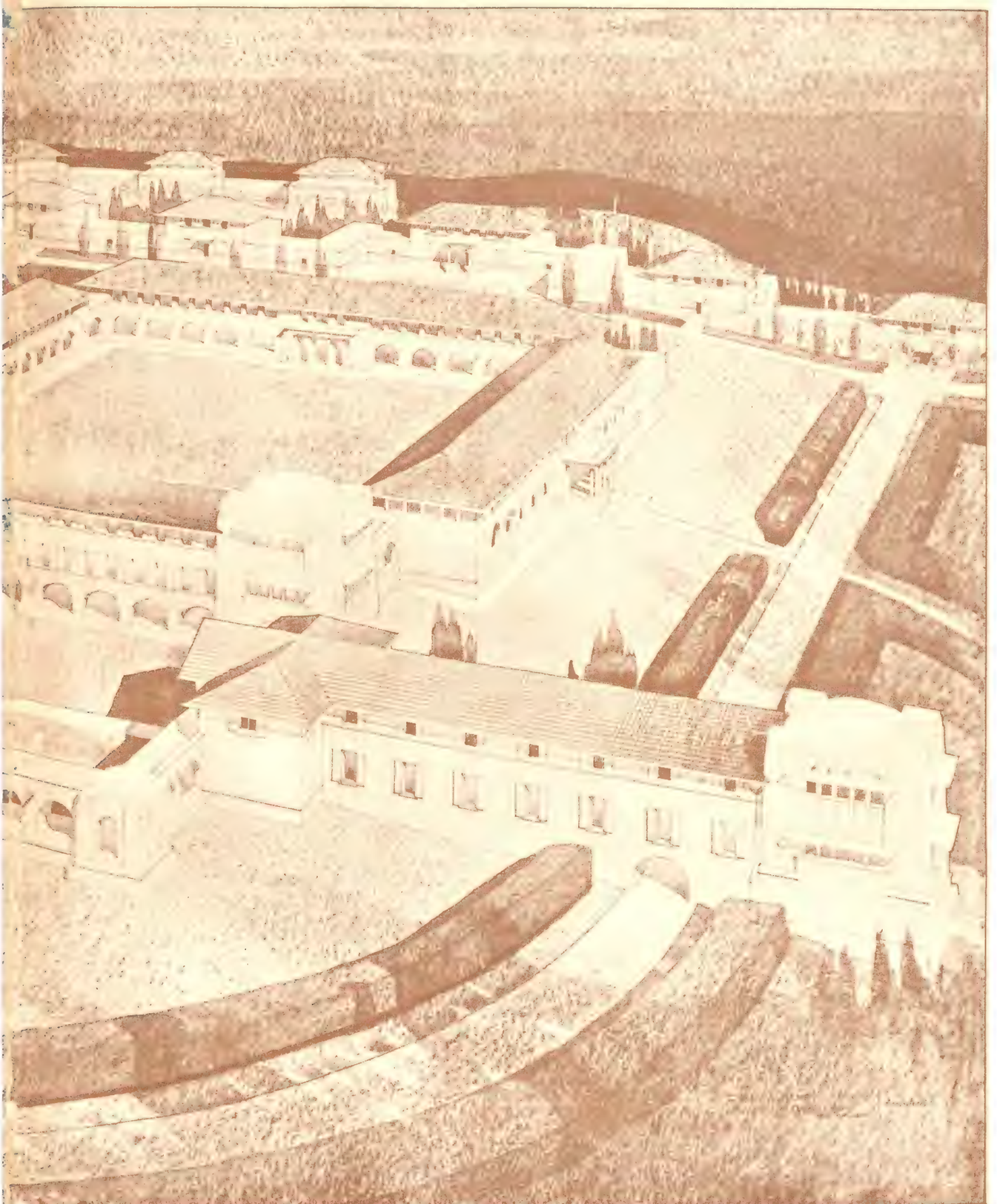
DESIGN FOR OFFICE BUILDING IN LONDON.

OSWALD P. MILNE & PAUL PHIPPS, ARCHITECTS.



SELECTED DESIGN FOR

CYRIL A. FAREY & GRAH



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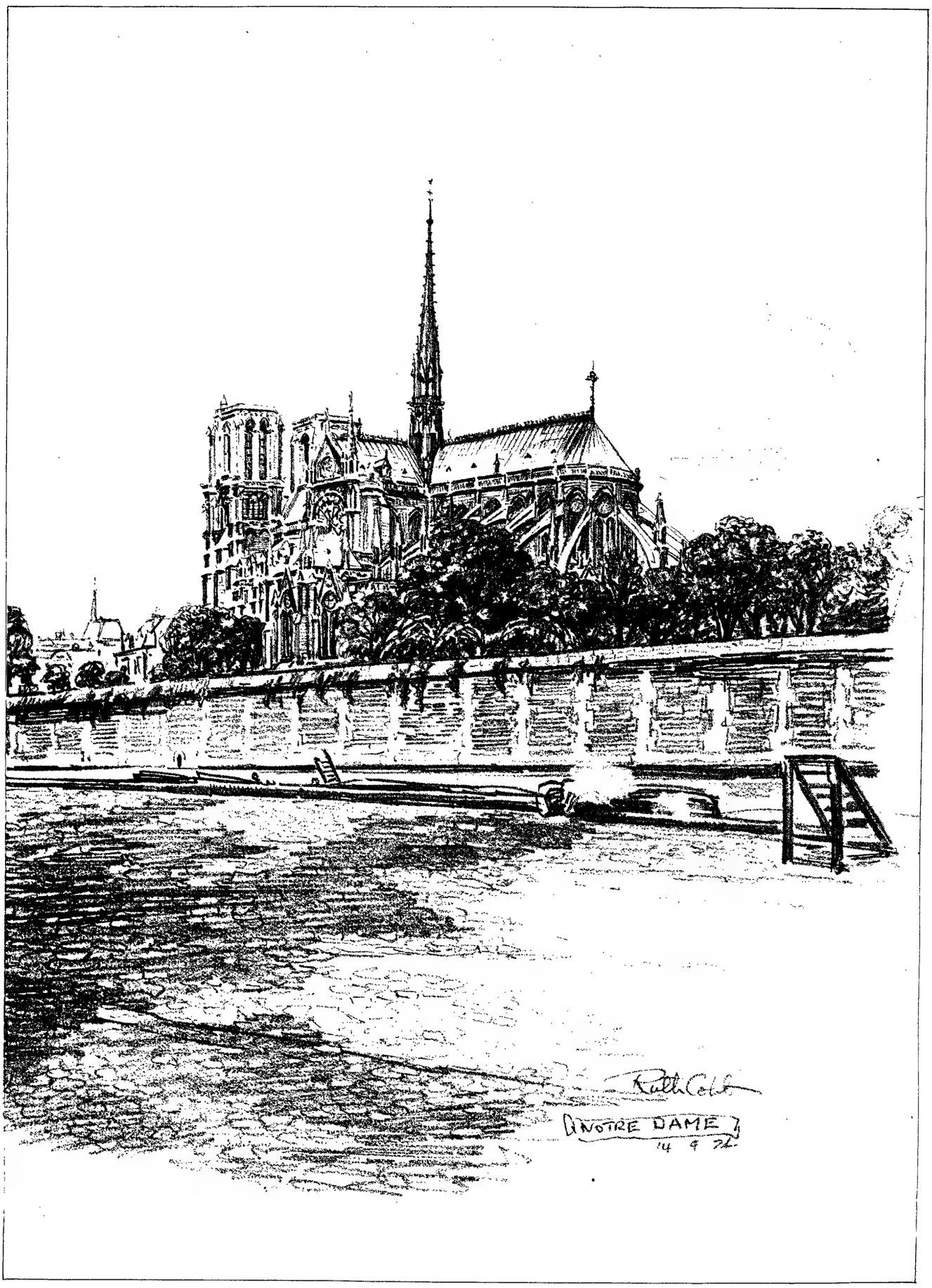
FLES COLLEGE, SINGAPORE.

M R. DAWBARN, ARCHITECTS.



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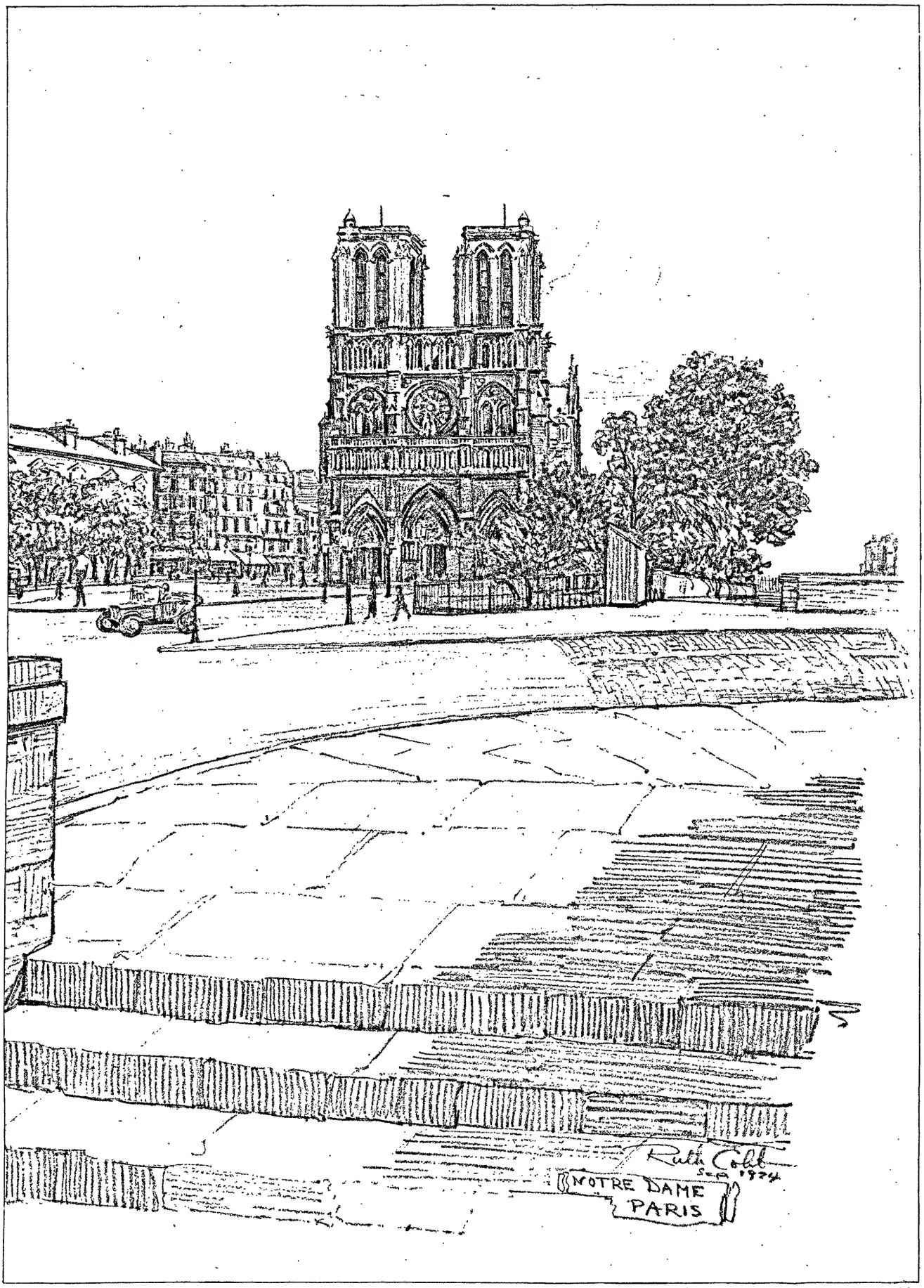
SKETCH OF NOTRE DAME.

BY MISS RUTH COBB.



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SKETCH OF NOTRE DAME.

BY MISS RUTH COBB.

Building Trade Notes.

By H. Bryant Newbold, M.S.A., A.I.Struct.E.

Babel.—We read in " The Book " that " they said unto one another, Go to, let us make brick, and burn them thoroughly. And they had brick for stone, and slime had they for morter. And they said, Go to, let us build us a city and a tower, whose top may reach unto heaven ; and let us make us a name, lest we be scattered abroad upon the face of the whole earth. And the Lord came down to see the city and the tower which the children of men builded. And the Lord said, Behold the people is one, and they have all one language ; and this they begin to do ; and now nothing will be restrained unto them, which they have imagined to do. Go to, let us go down, and there confound their language, that they may not understand one another's speech. So the Lord scattered them abroad from thence upon the face of all the earth ; and they left off to build the city. Therefore is the name of it called Babel ; because the Lord did there confound the language of all the earth."

So much for the days when the stone was brick and the mortar was slime. Whereas to-day, if we desire to saddle ourselves for life with an insoluble problem, all that it seems necessary to do is to establish a Ministry and to furnish it with a sufficient number of Advisory Committees that they may not understand one another's speech and leave off to build their city. About much talking there is always the danger that it may come to take the place of doing.

We learn that so far the Wheatley Housing Scheme has produced no houses, and at the same time we are told of yet another Committee to advise and assist the Minister of Health in carrying out the scheme contemplated (*sic* !) in the recent Act, particularly as regards the development and co-ordination of the supply of labour and materials for housebuilding. We learn also that both the employers and the operatives are represented on this Committee, and that even yet another Committee representative of the manufacturers and suppliers of building materials is in process of formation and that provision will be made for co-ordinating the committees by means of a small joint committee. And, of course, it would not be too optimistic to expect that if the language of all these committees and sub-committees should be confounded, there should be appointed even another committee of an interpretory nature. It is also of interest to note that in all this harvest crop of committees the architects are not represented, which seems a pity, for architects should be useful. And it should not be thought that there is any real harm in these committees. Talking is recommended for the lungs.

But meanwhile there is building—a very considerable amount of building—proceeding throughout the country. True, it is unsung, not the work of any Ministry, nor in the main is it the product of either the employers or the operatives' unions. It is in the main the quiet, unobtrusive and practically unmentioned work of the despised speculative builder and the unfederated operative. If almost any provincial town be visited there will be found in its outskirts cropping up large numbers of new houses which form no part of any housing scheme, and have in their construction no excitingly new methods. But they have one characteristic which gives them a value in the mind of the ordinary person at once beyond the contemplation of any Ministry or committee. They are houses which can be lived in and for which we can afford to pay.

Those who are still without a house to live in might be forgiven for feeling contented to forgo even Ministries and their committees if only they could have a house ; and it cannot be forgotten by such that before the era of Babel the speculative builder supplied the needs of the community and there was no housing problem.

The Traffic Problem.—Contemporaneously with the appointment of a Ministry of Transport the traffic problem becomes acute ; it is apparently incapable of solution. The ordinary man in the street may be forgiven for having a growing conviction that the problem is unsolvable even with the aid of a Ministry and, of course, committees.

To the ordinary person the application of mere common-sense first principles may appeal. And to anyone with the slenderest technical knowledge it may seem a very obvious and axiomatic fact that if a stream be forced into a conduit of a cubic capacity insufficient for that stream, the conduit must prove unequal and must either become choked, burst or otherwise overflow. This would seem just ordinary common sense, and the obvious inference is that whether there is any solution or not to the problem of the traffic in our streets, the only effective course possible of application is control of the stream. No grandiose schemes, no towers of Babel, nor even roadways along river beds, will serve as a substitute for control. The thought may give rise to some introspection. We have always considered that London traffic is the best regulated in the world. Even if this be so, is it regulated as well as it might be ? In fact, in what does the regulation consist ?

Getting down to facts, it would seem that the only regulation that exists is of a negative kind, consisting of a holding up at crowded crossings, together with a kind of unwritten law that slow-moving vehicles should keep to the side of the road, leaving the centre free for the fast-moving. Beyond this what traffic control is there ? Perhaps one other law, written or not, that buses must pull to the side of the road to set down and take up passengers, and this after crowded crossings are passed and not before. Here again is an impediment to the flow.

May it not be that in some apparently simple regulation lies in part the solution of the problem ? Let it be supposed, for example, that the slow-moving traffic be separated from the fast-moving and so far as is possible made to pass along different but parallel roads. Further, let it be agreed that if a stoppage has to be made before a crossing, that time, otherwise wasted, can be utilised for taking up and setting down. And that as pulling to the side of the road leads to continuous " cutting in " and consequent slowing down of the main stream, let it be imagined that islands shall be constructed in the middle of the road, and that by means of these passengers shall be taken up and set down. Communication to these central islands from the footpaths might be either by subway or overhead, and the islands themselves could be double-decked, of the same height as the upper deck of the buses. The introduction of some such simple common-sense regulations could not fail to expedite transit and the constructive necessities would be within economic possibilities.

Seaside Improvement Schemes.—People resident in the country and at seaside places say that the best swimmers come from London. This fact is no doubt attributable to the number of excellent swimming baths that are at the service of the Londoner. Consequently, the decision of the Skegness Council to advertise for tenders for a large work of improvement to their parades gives rise to the thought that much might be done, and that very much still remains to be done, at almost every popular seaside resort on our coasts. Certain outstanding examples there are where what were dreary wastes at low tide have been transformed by means of permanent sea lakes into features at once beautifying and advantageous. The front at Southport with its lake and bathing pools is one, and now the Skegness Council, emboldened by the remarkable success of its boating lake, has decided to construct a marine drive of over one mile in length and to erect a bathing pool with an orchestral pavilion adjoining. The boating lake shelter will accommodate 1,500 persons, and the orchestral piazza will render possible the sheltering of 2,500 during musical performances. The new marine drive, which is the first portion of an ultimate length of five miles, in addition to serving as a bulwark against encroachment by the sea, will form a course for motor speed trials, with which the town has become associated of late.

To anyone conversant with our seaside resorts and the inherent ugliness of the rear elevation appearance of their fronts here will at once be recognised one of the most effective and at the same time revenue-producing methods of

absorbing quite appreciable numbers of the unemployed in the building and public works industry.

Unemployment.—In common with other industries unemployment grows in the building industry under the guidance of a Labour Government. Whatever the plan for the solution of this which they were stated to have up their sleeve nine months ago, it still remains in that position of eclipse. Here, again, is it too obvious a statement to repeat that the antidote to unemployment is work? The simplicity of such a statement, almost a platitude, might seem offensively unnecessary. But that it is necessary to some is evident from the remarks of Mr. W. Green, of the Bricklayers' Society, in the discussion which followed a paper delivered by Mr. A. Nelson Bromley on "Slow and Costly Building." Mr. Green is reported as having declared that he had never known of any limitation of output. In this matter we feel that Mr. Green's experience has been fortunate, as at the same time we cannot conceal from ourselves that his horizon must have been limited. And if Mr. Green can spare an afternoon of any day in the week except Saturday, when sports are toward, we will show him examples of output which may be described as certainly limited, if no harsher term may be used. We will show him jobs where for periods amounting to something quite considerable in total no work whatever is put out. We will show him one man working on a pair of ten-rung steps with an assistant to hold them lest he should fall from the second step to the ground—a distance of 2 ft. And we will show him jobs in process of being visited by union officials engaged in seeing that the recognised limit of output in bricklaying is not exceeded.

But though Mr. Green has never known of any limitation of output, he is broadminded enough to assign reasons for its existence if it does exist. This he attributes solely to the fear of unemployment. In this predicament we can do no better for the sufferers from such timidities than to remind them that the psycho-analysts have discovered the origin of fear to be a desire on the part of our baser nature for the very condition that we fear with our better selves; and as an antidote for this, what the psycho-analysts term a "phobia," this fear, we cannot do better than repeat the old advice, "Go to, thou sluggard; study the ant." For we have yet to see an ants' nest in which there is any evidence of a fear of overwork resulting in unemployment, though we can readily conceive of limitation of output rapidly bringing to a stoppage all the work of a thriving community of ants and ending in death. This, in fact, is what does happen when the weather gets too cold—work stops and the ants die. Until the operatives learn that slowing down of work is the direct cause of unemployment, they will suffer in the way the ants do when the weather grows too cold for work. This is a pity. It is worse. It should be made criminal for any organiser to teach that pernicious falsehood that slowing down means more work for all.

Rubber Paving?—A corporation inquires the name or names of firms manufacturing rubber paving for roadways. It is desired to give consideration to the subject in connection with the paving of the streets adjoining a large hospital. Our corre pondent refers in particular to the experiment of rubber paving round the Cenotaph, noting the fact that this has been removed and wood blocks substituted. Our advice is sought in the matter.

We have no hesitation in declaring, in spite of the instance noted, that rubber paving is an excellent device which has a great future before it. We have watched this experiment with great interest and care, from its first laying to its final removal; and we are convinced that the fault did not lie in the rubber itself, but in the method of laying. Rubber paving in slabs is, of course, no new thing, and has proved its worth and durability in situations under cover as at Euston and St. Pancras: and we believe that if a satisfactory method of laying in blocks could be devised the durability of rubber would surpass that of any other form of paving. The matter is one of even greater importance than may at first appear, involving as it does the nerve strain due to noise of traffic in any big city. The habitué, possibly, may be unconscious of the noise of traffic; but it has not been proved that it is necessary to be conscious of noise or shock to suffer therefrom. In fact, it would seem that the opposite is the case, and that the effect of noise or shock may be registered by the nervous system unconsciously. In surgery, though anæsthetics are used, the system suffers from shock, though unconsciously.

Consequently in the discovery of a successful method of laying rubber paving may lie an incalculable benefit to the dweller in cities and large towns. And for any such position—the immediate neighbourhood of hospitals—as is contemplated by our correspondent anything which will reduce noise is vital.

Our theory that the fault was not in the rubber itself at the Cenotaph, but in the method of laying, is proved by the facts. The blocks when removed after five months were almost as good as when laid. But the tendency of all paving is to creep in waves in the direction of the traffic. A line showing the progress of such creeping drawn from kerb to kerb would form two curves having the greatest deflection in the centre of the traffic line and in the direction of the traffic. That all pavings suffer in this way is known, and that rubber blocks are specially susceptible to this creeping was additionally evident from the fact that during repairs round the Cenotaph portions of the roadway were used for different periods by contrary streams of traffic; with the result that the lines of the joints between the blocks, which under one stream of traffic curved in the direction of that stream, under the other were seen to curve in the opposite direction.

The solution of the problem would seem to lie in a contrivance for counteracting this creeping movement; and this should not be beyond the powers of the engineering profession.

Given this, we see no reason, as we stated above, why rubber paving should not prove a very valuable method of paving generally, and especially in positions where quiet is so necessary and in that suggested by our correspondent. We should be glad to hear from the makers of rubber paving with regard to this matter.

"The Architect" Fifty Years Ago.

October 24, 1874.

Mr. Ruskin's Lectures.

Mr. Ruskin, as Slade Professor at Oxford, will give two courses of lectures during the current term, the first on Mountain Form; the second on Florentine Art. The first course will consist of four, the second of eight lectures; and they will be given consecutively, at noon, in the drawing schools, on Tuesdays and Fridays. The first lecture on October 27.

Course 1. Mountain Form on the Higher Alps:—
- Lecture 1. The Alps and Jura.
- „ 2. Alpine Forms produced by Snow.
- „ 3. Alpine Forms produced by Ice.
- „ 4. Relations of Æsthetic to Mathematic Science of Form.

Course 2. Æsthetic and Mathematic Schools of Art in Florence:—

A. Æsthetic Schools of 1300:—
- Lecture 1. Arnolfo.
- „ 2. Cimabue.
- „ 3. Giotto.

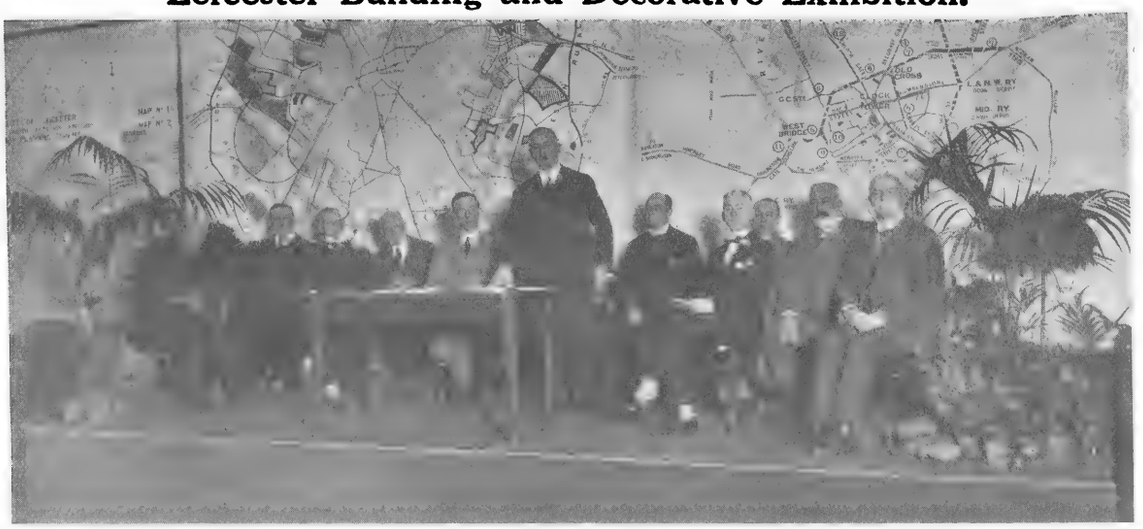
B. Mathematic Schools of 1400:—
- Lecture 4. Brunelleschi.
- „ 5. Quercia.
- „ 6. Ghiberti.

C. Final Efforts of Æsthetic Art in Florence:—
- Lecture 7. Angelico.
- „ 8 Botticelli.

Aylesbury.—The Town Council have appointed a committee to deal with the lay-out and development of the California housing estate, comprising some 100 acres, and the question of the design of a proposed bridge for vehicular traffic on the north side of the station, and so assist the development of the western side of the town.—The Council have decided to proceed with the erection of 64 houses under the 1923 rather than the 1924 Housing Act.—The borough engineer is to prepare estimates of the cost of a public library and reading room.

Barnes.—The Urban District Council are to erect a keeper's cottage on East Sheen Common.—Plans passed: 30 houses, Sunbury Avenue, for Messrs. Goodhew & Williams; club premises, Stanley Road, for Messrs. Cox, Taylor & Horton.

Leicester Building and Decorative Exhibition.



THE OPENING CEREMONY.

This Exhibition was opened by the Deputy Mayor, Councillor G. E. Hilton, on Thursday, the 16th inst. The chair was taken by Councillor H. W. Hallam, the chairman of the Leicester Housing Committee, who stated that he desired to publicly tender his thanks to Mr. Bentley, the promoter, for organising such an exhibition in Leicester, and he thought the town could not adequately repay him for what he had so successfully accomplished. He went on to say that the Housing Committee had spent considerable time in going about the country to find other methods of construction besides bricks, and they were therefore fortunate in having an Exhibition where alternative methods were to be seen. Such an exhibition ought to be of national character, and it would be of benefit if the Government retained the services of Mr. Bentley and sent him to the principal towns throughout the country to organise such undertakings. The Deputy Mayor, in opening, stated that this was a comprehensive Exhibition of everything appertaining to houses, and that he hoped that everyone interested in this great question would take an opportunity of visiting it. They would find within the walls of the City Training Halls much to assist them in this—the greatest difficulty that corporations, town councils and public bodies generally had to contend with at the present time. The vote of thanks to the Deputy Mayor was proposed by Mr. Stockdale Harrison, F.R.I.B.A., president of the Leicestershire Society of Architects, and seconded by Mr. Rudkin, president of the Leicestershire branch of the Federation of Builders. The Exhibition remains open until Saturday, October 25.

The Exhibition has been visited by numerous deputations of Housing Committees from many parts of England, Scotland and Wales, as well as architects, borough surveyors and municipal authorities, who have shown keen interest in the various methods designed to cope with the speedy erection of houses, some of which systems are shown for the first time. We shall probably give in a succeeding issue a further description of those that appear to us to be practical methods for speedy erection with skilled labour reduced to its minimum, and yet providing thoroughly sound construction in houses fit for the people to live in.

For large housing schemes the pier and panel systems have attracted much attention, and many discussions have been heard as to the comparative merits of pre-cast and *in situ* methods and of continuous concrete piers (or columns) and piers made in sections. In both use is made of steel reinforcement as well as in the panels. The Corolite construction (which in our report of October 17 was printed Carolite by typographical error) of solid poured concrete walls and floors differs from these, and has received its share of attention. The Triangular Construction Co.'s method of using triangular in place of rectangular units and thus securing a hard ballast outer wall and a softer breeze interior wall has been carefully studied, and also the elasticity in construction it provides.

It has been a surprise to most of the deputations that copper solid drawn tubes from a first cost point of view can be used for all hot water and domestic plumbing work more economically than galvanised iron pipes with practically the elimination of upkeep. The whole of the exhibits have points of interest, and we congratulate Mr. Bentley on the success of the Exhibition. We understand that arrangements are already made for holding another next year, and if the same care in selecting exhibits of practical utility to the building trade is exercised, it should prove even more successful than the first.

In our reference to the Silicate Paint Co.'s stand we should have stated that White Duresco No. 252 was used on the ceilings and cornices in their exhibit of two rooms most artistically decorated and exhibiting as it does the successful treatment of their material.

Middlesex County Council Schools.

The following tenders have been received for proposed alterations and additions at High School for Girls, Tottenham, N. Mr. H. Crothall, F.R.I.B.A., architect.

Maddison, W. J., Ltd., Minories, E. (recommended for acceptance), £14,754; Knight, H., & Son, Tottenham, N., £15,200; Lacey, W., Hounslow, £15,425; Stewart, J., & Sons, Tottenham, N., £15,620; Monk, A., Lower Edmonton, £15,727; Porter, A., Ltd., Tottenham, N., £15,900; Godson, G., & Sons, Ltd., Kilburn Lane, W.10, £15,910; Ferris Bros., Acton, W.3, £15,915; Fairhead, A., & Son, Enfield, £15,993; Bollom, Geo., Acton, W.3, £15,997; Newby, C. J., & Bros., Southgate, N., £16,050; Groves, G., & Son, Tottenham, N., £16,060; Lawrence, W., & Sons, Ltd., Finsbury Square, E.C., £16,116; Patman & Fotheringham, Ltd., Park Street, N.1, £16,821.

For the erection of new science laboratories, metal workshop and gymnasium at the County School, Tottenham, N.:—Groves, G., & Sons, Tottenham, N. (recommended for acceptance), £5,105; Knight, H., & Son, Tottenham, N., £5,115; Newby, C. J., & Bros., Southgate, N., £5,198; Porter, A., Ltd., Tottenham, N., £5,207; Stewart, J., & Sons, Tottenham, N., £5,224; Monk, A., Lower Edmonton, N., £5,282; Godson, G., & Sons, Ltd., Kilburn Lane, W., £5,410; Bollom, Geo., Acton, W.3, £5,459; Chessums, Ltd., Tottenham, N., £5,490; Lawrence, W., & Sons, Ltd., Finsbury Square, E.C., £5,500.

For the carrying out of alterations to the late offices of the Aircraft Manufacturing Co., Hendon, to adapt the premises for use as a secondary school:—Troy, F., & Co., Ltd., Finchley Road, N.W.3 £8,628 (withdrawn); Maddison, W. J., Ltd., Minories, E.1 (recommended for acceptance), £9,307; Knight, H., & Son, Tottenham, N., £9,594; Porter, A., Ltd., Tottenham, N., £9,774; Groves, G., & Son, Tottenham, N., £9,785; Monk, A., Edmonton, N., £10,270; Godson, G., & Sons, Ltd., Kilburn Lane, W.10, £10,525; Lawrence, W., & Sons, Ltd., Finsbury Square, E.C., £10,574; Ferris Bros., Acton, W., £10,610; Bollom, G., Acton, W., £10,786; Hill, A. J., Hendon, N.W., £11,480.

Legal Note.

In the King's Bench Division on Monday Mr. Justice Talbot, sitting without a jury, heard a claim by Mr. Richard Mountford Piggott, architect, of 35 Bedford Row, W.C., to recover £1,270, balance of fees from Wandsworth Borough Council in connection with the latter's housing scheme commenced in the year 1920. Defendants denied liability.

Mr. Barrington Ward, K.C., and Mr. Du Parcq appeared for the plaintiff, and Mr. Wingate Saul, K.C., and Mr. Crouch were for the defendants.

Counsel stated that the point was a short one, and was a question of the construction of a contract, a Government Department having instructed payments to be made on one basis and the Council on another. There was no dispute as to the figures, assuming that the basis the plaintiff contended for was the right one. Mr. Piggott in 1919 had just returned from the war and was just about to resume his practice as an architect and got into touch with the defendants, who had got in hand three separate and distinct housing schemes for the neighbourhood of Wandsworth. Mr. Piggott was appointed to the first of the three schemes, the Magdalen Park scheme. The defendants by their defence were alleging that all the three estates were part of the one building scheme for housing purposes, but they were all three distinct and separate. The one plaintiff was to carry out was an estate where the Council bought the houses completed, the second was building in the ordinary way, and the third was a conversion of houses scheme. In the month of August, 1919, plaintiff was appointed as architect under the terms provided by the Royal Institute of British Architects' scale. Then a memorandum known as No. 4 came out from the Health Ministry and plaintiff was approached to see if he would make his fees in accordance with that. In the end the memorandum was incorporated in the contract. Plaintiff then proceeded with the work and had to appoint and pay his own clerk of the works. He (Mr. Ward) should contend that the only scheme that the plaintiff was connected with was the Magdalen Estate, but the Borough Council seemed to want all the three architects of the estates to pool the costs, so that the remuneration the plaintiff got for doing more work would be reduced.

Plaintiff was then called and stated that he was an Associate of the R.I.B.A. He was appointed the architect of the Magdalen Estate, and when he was so appointed the other two schemes had not been decided upon.

Mr. Wm. Robert Davidge, F.R.I.B.A. and F.S.I., stated that he was Commissioner for the London Area for housing at the Ministry of Health. There were three separate schemes for Wandsworth—the Magdalen Estate, the Watney Estate and the Furzedown Estate, and each was distinct. The architect's work on each of the three was similar, but the basis of each scheme was different.

Mr. Wingate Saul, K.C., for the Council, contended that in regard to the construction of Memorandum No. 4 they must look to various sections of the Housing and Town Planning Act of 1919 to construe it properly. His contention would be that under the Memorandum, although several architects could be engaged on the work of a housing scheme, they were all to be paid on the same basis—five per cent. on the first twelve houses, two and a half per cent. on the next sixty, and one and a half per cent. on the remainder of the contract. That was irrespective of the number of architects engaged.

His Lordship, in giving judgment, said the plaintiff was retained for the building of 376 houses, and although the Ministry of Health suggested that the maximum should be 250, it was perfectly plain he was retained to supervise the building of the larger number of houses and on the terms of the contract. The defendants now said that the proper way to fix the remuneration was to average the cost of the houses, and then calculate a percentage on that figure. He could not think that was the true construction of the document, and there would be judgment for the plaintiff for £1,270 and costs.

Book Notes.

Messrs. B. T. Batsford, Ltd., 94, High Holborn, will shortly publish a companion volume to "Studies of the Human Figure," by F. R. Yerbury and G. M. Ellwood, entitled "The Human Form and Its Uses in Art" (18s. net).

There can be no doubt concerning the great improvement of this forthcoming book over the first book dealing with this subject, though this is but natural. In the first volume the authors were breaking fresh ground, and were naturally, perhaps, a little timid. In the new book there is a feeling that the authors have had very decided ideas as to what they desired to incorporate. They have naturally been supported by the great success which met their first venture. The introduction gives a short historical review of the decorative uses to which the human figure has been applied by the different nations from the earliest Egyptian times. This chapter is profusely illustrated with views of examples of the works of the great masters of the past. The window sculpture in the Louvre Courtyard, attributed to Paul Ponce and Jean Goujon; the well-known bronze Nymph and Cupid by J. Raon (1688) in the park at Versailles; bas-reliefs by Lucca Della Robbia, from a scene of the Passion, at Troyes; Bathing Nymphs, by Girardon, also in the park at Versailles. Sketches and studies by Alfred Stevens and Lord Leighton are also reproduced in this chapter, which undoubtedly aims at inspiring the mind to use the human form as the main and central feature in decorative schemes for many different subjects. The human figure unquestionably lends itself in an admirable way, and this new volume will undoubtedly be of great assistance to all who are interested in any decorative work in which it is desired to incorporate the human figure. The main feature of the new publication is undoubtedly the very comprehensive collection of illustrations which have been obtained from very good photographs of models which have been posed in many different attitudes. These attitudes and poses have been grouped together under separate titles, thus the first pictures illustrate sitting poses, which are followed by reclining figures, standing poses, bending and kneeling figures, etc., etc. The authors have taken the greatest possible care in their selection, and each illustration is suggestive of a practical application, whilst none of the poses are forced or unnatural. On the contrary, they are easy and graceful, and thus will be of far greater use than had the case been otherwise. Considerable attention has also been given to the details of the human figure. The hands and feet and facial features have not been neglected. Students who are able to obtain a model will find their work considerably lightened by using the illustrations in this volume in conjunction with their life class studies. The pictures are refined in every way, and whilst in the first volume the illustrations were quite good, those in the new volume are far and away superior from every point of view. Immediately preceding the photographic illustration is a chapter entitled "Notes on the Poses." The illustration are here described, and the authors give an indication of the purpose they had in view in connection with the different poses included in their collection of plates. Thus plate lxxxix (a), "A Weight Lifter," has been so posed as to make a very good centre feature in a rectangular space; lxxxi (a), "A Throwing Pose," showing the balance of the arms. One hundred and sixteen photographic views of different poses are included in the volume, and one hundred and forty-three figures are included in the photographic illustrations, many of which individually illustrate figures in natural actions, which will be found eminently useful. In addition, quite a number of designs by modern artists and designers are included in the volume, which we can strongly recommend to all art students and artists as well as to those members of the architectural profession who are interested in the application of the human figure to the decorative and plastic enrichments of their designs.

Correspondence.

To the Editor of THE ARCHITECT.

SIR,—Knowing that you take great deal of interest in the traffic problem of large cities, I enclose a solution for the same, which might interest you.

It cannot be denied that cities undergo certain transformation with the change of life and condition of the people. These transformations, if allowed to grow without any forethought, gradually obscure noble structures and rob the city of its beautiful surroundings.

It must be admitted that engineers and architects give but little attention to the city traffic, despite its close relationship with the general view of the city. It is not an unusual sight to see in some of the beautiful cities, public conveyances of most disrespectful and ridiculous design. Moreover, as the city grows buildings of various size and design spring up on all possible and impossible space. This highly concentrates and centralises the business, thus causing serious traffic congestion. To get over the difficulties very often the city is deprived of its best architectural beauty and often the free gift of light and air is shut out from it.

Time has come when the growth of a city must be studied as a whole from its all different aspect.

The system proposed will not only relieve congestions from the congested road crossings, it will also beautify the crossing where it may be adopted. Moreover, the system, if applied to all new roads will safeguard the future traffic congestion on such roads.

It may please you to know that the system has been very highly recommended by the Advisory Board on Highway Research, Washington. The members of the National Highway Traffic Association unanimously declared that this "Island System" has distinct advantages in its efficiency, simplicity, safety and architectural possibilities.—Yours, etc.,

J. N. GANGOPADHYAY.

Painting Materials and Their Application.—III.

By E. Clay Inston.

PINHOLING OR POCKING, i.e., the appearance of tiny holes in the surface, often developing, as the paint hardens, into miniature "craters." *Causes:*

(*a*) Mixing two paints or varnishes of different quality.
(*b*) Hurried grinding at works to meet a "rush" order.
(*c*) Want of ventilation while work in progress.
(*d*) The presence of oil or turpentine in the brush.
(*e*) Fumes from ammonia.
(*f*) Humid atmosphere.

The remedy in a slight case is to carefully rub down to a good surface and re-execute.

If very bad, burning or stripping off may be justified.

CRACKING.—Long hair cracks in the finished work. Due to:—

(*a*) Inferior facing material.
(*b*) Following too quickly upon a heavy undercoating and before it is dry.
(*c*) Coats not in proper sequence—i.e., one gloss coat on top of another, or two flat coats together.
(*d*) The presence of soda or other alkali on the work being painted, due to careless washing and preparatory work.

To make good, small patches may be carefully rubbed down with pumice or glass paper in water and recoated.

If bad, the work should be stripped and repainted.

CROCODILING.—The appearance of cracks giving a surface similar to crocodile skin. This can be expected in painted or varnished work which has been exposed to the elements for eight or ten years, but it frequently occurs in a shorter period, when the cause may be due to:—

(*a*) The presence of too much white spirits or naphtha spirits.
(*b*) Poor quality or "new" oil in the paint.
(*c*) Poor quality of other components.
(*d*) Excess of driers.

Only prevention—use good quality paint and see that it is properly applied.

Only remedy—burn or strip off and re-execute from the wood.

CHALKING.—The appearance of a white powder on the painted surface, accompanied by a lack of "life." The white substance may be rubbed off with the finger. Due to:

(*a*) The use of inferior pigment materials in the paint.
(*b*) The use of a new or immature oil with otherwise good components.
(*c*) An excessive amount of extender.
(*d*) The presence of an alkali (usually soda) used in preparatory work and not properly washed off and neutralised.

Remedy.—Preferably burn off or strip to the wood or plaster, but if possible to thoroughly rub down with pumice, this may suffice.

YELLOWING.—A condition in which whites and ivory whites deepen in colour almost to a yellow buff.

If a white paint containing white lead in large or small quantities is used this result is inevitable in time.

For white work use a paint based on either zinc oxide, lithopone, or Titanium white (about this last named a few words later).

Good light coloured oils are also essential with pure or Paris whites, but darker oils do no harm to ivory whites.

PHOTOGRAPHING.—The condition in which a light coloured paint turns darker when protected from light rays—as behind pictures, etc.—due to the presence of lead sulphide which is reacting upon the zinc oxide and other ingredients.

Remedy.—If not too greatly affected, exposure to strong sunlight may effect an improvement—otherwise there is no cure except re-execution.

SHEARINESS.—A condition in which the paint shows stripes or patches of a different gloss to the remainder.

Due almost exclusively to bad workmanship. The indiscriminate addition of turps or oil will also produce similar results. Found most frequently in egg-shell or flat finishings, which always require careful workmanship. Insist upon the work being re-executed in a proper manner.

I have tried to deal with some of the faults which are met with most frequently—there are many others—often little tricks of workmanship which are encountered and can only be detected in early stages, and responsibility assigned, by an experienced man. Of the defects enumerated some are most frequently met with in varnishes others in painted work.

Perhaps I may just refer to a few salient points once more:—

(1) Specify for preference materials manufactured by a firm which treats its own oils, and in addition has facilities for maturing them.

(2) Go to a paint manufacturer who will give you the services I have mentioned in the earlier paragraphs. There are only a few such firms, and their prices may be a little higher than the others, but when you consider that the cost of material represents only 25 per cent. down to 8 per cent. of the total cost of a job, the small increase in price per gallon is well worth spending.

(3) Employ as reliable a painting contractor as you can find—not necessarily the cheapest at first cost but the most economical in the end.

(4) See that the preparatory work is not "skipped."

(5) If any other than a lead base paint is being used, ask the contractor to use flat brushes instead of "pound" brushes. He may not like it at first if he is at all conservative, but will probably thank you in the end, and you will be satisfied with the job.

(6) See that the workman's kettle contains only sufficient paint or varnish for an hour's work—say not more than 1¼ in. deep in a kettle 6 in. diameter or 1 inch deep in a 9 inch kettle. (The smaller sized kettle is the better.)

(7) Specify that separate priming, under, and finishing coats are to be used as obtained from the manufacturer.

(8) Take a few samples occasionally from newly opened drum or can and from kettle and compare the two.

(9) In the early stages have a small sheet of glass—about 6 inches by 6 inches—painted with each separate material. Held up to the light and examined in a general way it will give some indication of the quality of material.

I mentioned Titanium white. This is a white material prepared by the Titan Company of Norway and marketed in this country by Messrs. R. W. Greef & Company. It is extremely opaque, is absolutely inert, and therefore will not react upon the other ingredients. It is excellent for laboratory work and in similar places where chemical fumes would quickly discolour ordinary paints. It is finely divided and paints and enamels made from it are absolutely free from grittiness and general coarseness. (I believe that Titan White has a market amongst perfumers as a base for face powders! It is perfectly harmless!) The writer has used it on several occasions and found that two coat work covers as well as three of zinc paints and four of lead. On one job—an external painting—which had previously been neglected for about eight years, the first coat of Titanium paint (containing only 18 per cent. of Titan White) would have been sufficient so far as appearance was concerned.

LONDON.—The Metropolitan Asylums Board have now prepared estimates showing the cost of converting the Grove Park Institution for use for advanced cases of tuberculosis to be £54,870.—A scheme has been prepared for a new block and improvements at the North Western Hospital at a cost of £8,936.

PUTNEY.—The Borough Council have asked a sub-committee to report as to the provision of an open-air swimming bath.

TORQUAY.—The Town Council have decided to proceed with the complete scheme of sea defence works to Corbyn beach.—Plans passed: 36 houses, Barton Road, for Messrs. Ball & Wilkinson; 10 houses, Warberry Vale, for Mr. H. C. Goss; additions to Grand Hotel, for Mr. J. B. Gilley; new parish hall, St. Mary Church, for Church Council.

Building Progress.

Adjoining the premises of the Regent Street Polytechnic and forming indeed an extension of the present design, a large rebuilding scheme is now in hand, F. & H. F. Higgs, Ltd., being the contractors, and Somerville-Barnard, Ltd., supplying the steelwork. C. A. Abrahams is the housebreaker and excavator. Though the premises give the appearance (as just stated) of being an addition to the Polytechnic, yet the ground floor is to form a shop and is to be let with the basement and large upper part.

Nearly opposite the Polytechnic and adjoining St. George's Hall, a block of premises is to be built, with Edcaster, Ltd., as general contractors and St. Mary's Wharf as housebreaker.

An important pile now well in hand is the College of Nursing, Ltd., in Henrietta Street, Cavendish Square. J. Mowlem & Co., Ltd., are the general contractors, and Archibald D. Dawnay & Sons, Ltd., are furnishing the steelwork. It is a building of ground and four storeys, and has a pleasing Portland stone façade.

Messrs. Trollope & Colls are making extensive alterations at Nos. 69–71 Welbeck Street. The British Luxfer Prism Syndicate, Ltd., is supplying the pavement lights.

Further to our remarks in our issue of August 29th last concerning a large block of circular corner buildings on the site of Nos. 47–57 Gresham Street and Nos. 22–26 Wood Street, we can give the following further particulars as to subcontractors :—The Crittall Manufacturing Co. for metal windows, and the Vigilant Sprinklers, Ltd., for sprinkler installation. The building will be stone-faced.

In Aldermanbury, near London Wall, Messrs. Joseph have recently designed an unusually effective office block, of which Messrs. Higgs & Hill, Ltd., are the builders. But effective as is the design, it lacks a certain measure of architectural propriety, as the window treatment enwraps four storeys in what the design exhibits as but one. The horizontally fluted window architraves are an interesting feature. The building is stone-fronted.

No. 38 Gresham Street, at the junction with Lawrence Lane, is undergoing reconstruction at the hands of Y. J. Lovell & Son; H. Young & Co., Ltd., are supplying the steelwork.

Alterations and decorations are just being put in hand at No. 151 Queen Victoria Street, the firm employed being Hewitt & Sewell (Mr. A. Dyer). An effective wrought iron two-storey show front is an important feature in the works.

The West London Hospital is just now in the hands of the builders, John McManus, Ltd. ; the heating is being carried out by James Gray, Ltd.

Other buildings receiving attention in Hammersmith Road, besides the West London Hospital, are: (1) those referred to in our issue of September 19, where the Albion P.H. is now in process of rebuilding as part of the new block, Nos. 121–127 ; Lindsay's Paddington Ironworks, Ltd., are supplying the steelwork; (2) also No. 247 is receiving a one-storey wing extension, the builders being A. Pascall & Son.

The Beaconsfield Hotel in Blythe Road, West Kensington, is undergoing alterations at the hands of F. D. & H. Head, Ltd. ; Carrara ware facing is being introduced for the ground storey corner frontages.

Another work now in progress in Hammersmith is the large reinforced concrete extension for Fuller's, the delectable confectioners ; the factory in Great Church Lane is already of some importance, but with the five-storey extension (still far from completion) the importance will be intensified. The Hennebique system of reinforced concrete construction is being used throughout.

We recall the days when Ealing was barely more than a village with but one railway station and without tram or omnibus services, and when the northern prospect towards Harrow was unobstructed. Now it is a notable town, giving the title to the Parliamentary district, and its importance will be underlined shortly by the incorporation within its boundaries of Hanwell and Greenford. Such progress demands constant building activity, and the evidences of this are not far to seek. The Ealing Common Estate is at present being developed by the provision of semi-detached middle-class houses sufficiently attractive in appearance, disposed upon two storeys and presenting the familiar brick and roughcast façades. Mr. A. A. Stamford, P.A.S.I., is designing the houses, which are being built by William Daley & Co. We believe that the London Brick Company are supplying the bricks and tiles, Southwater bricks being largely employed ; W. N. Froy & Sons are supplying the sanitary fittings throughout.

The Railway Hotel, Ealing Broadway, is having a small extension, Myring & Son being the builders employed ; and No. 39 Broadway is having shop alterations made by A. Davies & Co.

The Mall, Ealing, is also partially in the hands of builders. What we can recall as a cornfield has long since been transformed into shops and houses. One of these was built as a grammar school, having a lecture hall, five reception and 15 bedrooms and extensive grounds. Boys gave place to girls, however, and these again have disappeared, and the property is now in the market ; Girton House (as it is now called) is at present having electric lighting works installed by Mr. H. C. Poole. On the opposite side, where once stood a very fine block of nineteenth century almshouses (designed by Mr. Rushworth), is now a row of shops. Nos. 64 and 65 are undergoing alterations in the hands of George Parker & Sons, Ltd. ; Lindsay's Paddington Ironworks, Ltd., are supplying the steelwork.

One of the charming old houses which we remember at Ealing in the long vanished years was D'Eresby House, belonging to the Willoughby D'Eresbys ; this was demolished many years ago to make way for large and not too attractive flats, which, however, were never erected, and the site has remained derelict for a lengthy period. Now there is being erected a really pleasant residence, which, with its two-storeyed bow windows on either side of the entrance, and with its tiled roofs and roughcast walls, will do what is possible to supply, and may succeed in supplying, the lost charms of the old house. Messrs. N. Green & Co., Ltd., are the builders.

Messrs. W. J. Jennings & Co. (Paddington) are about to erect 20 houses on the Cleveland Estate, West Ealing.

Some shops, with flats, are now being erected in the High Road, opposite Ealing Common Station. There is to be a row of twelve (or thereabouts) ; the façade treatment is red brick with stuccoed dressings and entablature. The flat roofs will be asphalted by Salter Edwards & Co., Ltd. Mr. W. J. Dickes is the builder.

The progressive policy of Conservative Ealing, so far as building is concerned, may be further illustrated this week by reference to the development of the Grange Park and adjoining Estates, where we are pleased to see that middleclass houses are being erected. If we so express our pleasure, it is because of the present-day political pandering to the one class, which is certainly not that of the nouveaux pauvres—otherwise, the middle class. To see a borough like Ealing devoting itself to the provision of houses for the latter is consequently a delight. In Elm Grove Road, S. Barron is erecting semi-detached two-storey houses of quite a pleasant type of design. Honor Brothers are the electrical engineers employed, and the drain pipes are those of G. Jennings (of Poole). In the same road, W. J. Dickens is engaged upon an attractive two-storey double-fronted residence, with conservatory and garage. In Warwick Road, Read and Parker are erecting a number of two-storey semi-detached seven- and eight-roomed houses, where Harris & Gubbins are installing the electric lighting, Eastwood 4-pressed bricks are being used (apparently a Fletton brick), A. C. Jones & Sons (of Acton and Chiswick) are executing the tarpaving, and the Loveday Nurseries (Ealing) are laying out the gardens. The National Radiator Company (Hull) are supplying for the kitchens the No. 1 Ideal Open Fire Boiler. "New Rexis" w.c. apparatus are provided. In the shops opposite Ealing Common Station (to which we recently referred) Davies & Co. are acting as shopfitters. In Ascott Avenue, H. & W. Kendall are erecting semi-detached houses. Finally, the old Theatre Charming Cinema at West Ealing, is to be altered and enlarged from the designs of Mr. G. Percy Pratt, A.R.I.B.A., architect to the Macnaghten Kinema Theatres, Ltd.

The rebuilding of Nos. 67–68 Hatton Garden is in the hands of Kirk & Randall, Ltd. David Colville & Sons, Ltd., are supplying the steelwork. The new buildings are just now in a very elementary stage.

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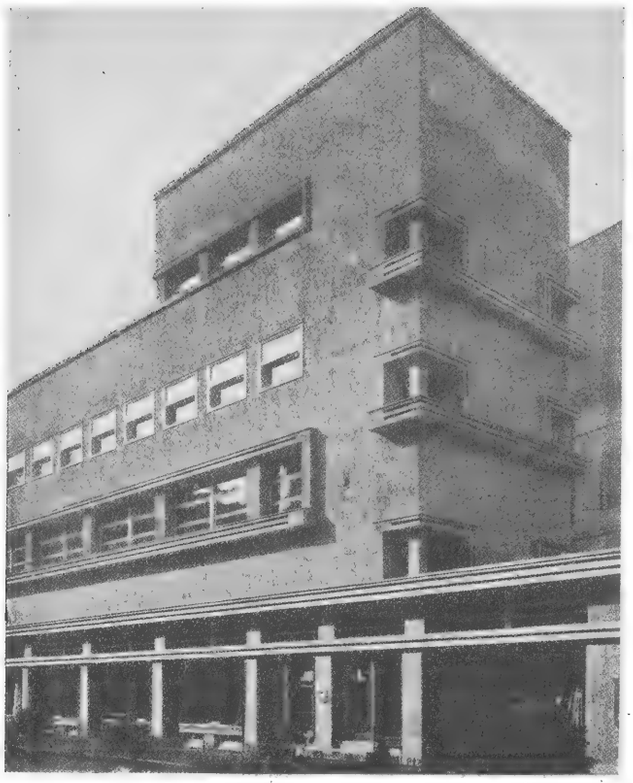
Stylism or Nihilism in Architecture.

CONCRETE CHURCH AT RAINCY, FRANCE: GENERAL VIEW OF THE INTERIOR.

The book which Messrs. Benn have recently published on what may be called the Mendelsohn Sonata of Form is interesting and informative. When we see an occasional illustration of the weird forms affected in some foreign countries it is difficult to arrive at any accurate judgment of the possibilities opened up by the adoption of new standards. But when, as in this case, we have a number of designs of various types of buildings all designed on similar lines, it is possible to judge of them as a whole and to arrive at a juster appreciation of possibilities.

The Einstein Tower at Potsdam may be eliminated, because it is simply the outward casing of a building specially designed for a scientific purpose for which it is presumably suited. It is appallingly ugly, resembling nothing so much as part of an uncouth battleship, but this may be necessary to the performance of its functions. It can be said to be no more architectural in its character than the outer surface of a boiler.

We do not know whether the Optical Factory 1917, Aerodrome 1914, or Smelting Works 1914, represent



STAIRCASE TURRET: THE SILK HOUSE OF WEICHMANN, GLEIWITZ, UPPER SILESIA.

buildings actually carried out or are only imaginative sketches, but they fall in an intermediate category, as they show ability in the composition of great masses of form which might prove satisfactory in execution and are reasonable if dictated by the necessities of the occasion. The Hat Factory at Luckenwalde belongs to a class of building which is purely governed by practical considerations, and may be either carried out by architect, engineer or anyone who has a knowledge of the structural problems involved.

The only buildings in the book which can be said to fall within a purely architectural category are a couple of angle houses in Karolinger Platz, Berlin, the buildings for the Berliner Tageblatt, and a small business block at Gleiwitz, Upper Silesia, and from these we have to form an idea of the merits of the "new expression." Briefly, these are all based on the treatment of a building as a square block broken by ranges of windows arranged to emphasize horizontal lines and with massive horizontal concrete projections here and there to still further emphasize horizontal proportions. The grouping of windows at an angle, a structural difficulty with most materials, but a feat easily compassed when ferro-concrete is the material used, and the use of a certain proportion of rough brickwork to give variety, seems to cover the whole of the range of Mendelsohnian compositions which are singular without affording any evidence of suggested newer basis of architectural forms.

A similar but more subtle and architectural rendering of the same nature was afforded by the Children's Hospital in South London, executed some years ago from the designs of Messrs. Adams and Holden, in brickwork. There the architectural effect depends on juxtaposition of masses of different heights, and skilful use is made of receding planes of brickwork, coupled with the avoidance of almost all moulding or decoration. Much can be done in a simple manner by keeping the inner face of walls vertical so as to be able to utilise the offsets arising out of the thinner upper walls for architectural emphasis. This is entirely legitimate and has its prototype in many of the German Romanesque buildings. Adelaide House is an example of a similar kind owing its effect to the impressiveness of its silhouetted outline and fenestration. One can say at once of such essays in design that, given mass, certain architectural effects are bound to be produced providing that the designer does not destroy them by mistaken lines. In Adelaide House we might, perhaps, have preferred some modification in the entrance design and the decoration between windows, but the effect of the whole is unquestionably impressive and pleasing. The Kodak building in Kingsway is another instance of a building in which detail has been almost entirely omitted and which relies for its effect on form and proportion.

We make mention of these English buildings as they prove that some of our architects have designed buildings in which details are as simplified as those in Mendelsohn's work, but have avoided a note of exaggeration which in the latter is carried to an absurd length. We all know that the use of ferro-concrete makes many things possible which could not be attempted in ordinary materials. We can if we like project balconies of any width beyond the building line, we can cut away angles leaving them with no apparent support, but these things do not constitute a new revelation in architectural style. If, on the other hand, ferro-concrete were to enable us to carry out an architectural conception impossible in another material but desirable and reasonable in itself, we might reach the threshold of new architectural developments. The very interesting French Church we illustrated some time ago and now reproduce shows an original and interesting use of the material and has distinct architectural possibilities, but stands almost alone as showing a good and original manner of using the material architecturally. Be this as it may, the architect who wishes to attempt building on the lines indicated by Mendelsohn has an easy task before him, providing he can obtain his client's consent to an innovation. He has but to arrange his windows in horizontal bands with a minimum number of vertical supports—an essay easy enough with ferro-concrete—and to emphasize these bands with projections of ferro-concrete—also an easy task—and finally to finish his buildings with flat roofs with or without parapets, and to eliminate all other detail. It is a recipe easy for anyone to follow, but one we should tire of with constant repetition, nor do we see that very great progress is possible along such lines. Admittedly, for some factory buildings erected in positions in which appearance is immaterial, the method has its uses, but even then it is doubtful whether the same object could not be gained in a more pleasing manner. We do not think that Mendelsohn has shown us anything which could not be far better done by almost anyone without much effort, and we certainly do not think that such buildings are likely to replace those which will take shape from eliminations and additions to what has come down to us from past traditions in the art of building. We need not attempt to follow Mendelsohn's own theory, which is rather an essay in metaphysics than a considered architectural argument, and which, like metaphysical theory, is most difficult if not entirely impossible to follow.

The Dodworth U.D.C. are considering the question of sewage disposal. They have asked Messrs. W. H. Radford & Son, of Nottingham, to report on their present works and to submit a scheme for improving them.

Our Illustrations.

THE HALL OF HIS EXCELLENCY THE GOVERNOR'S RESIDENCE, PRETORIA. HERBERT BAKER, A.R.A., Architect.
SKETCHES OF HAMPSTEAD. By Miss J. E. TARRING.
"IVORIES," COWFOLD, SUSSEX. W. H. BRIERLEY & J. H. RUTHERFORD, Architects.
NEW MIDLAND BANK, DARLINGTON. W. H. BRIERLEY & J. RUTHERFORD, Architects.

Notes and Comments.

Cardiff's Development.

Mr. W. S. Purchon, in his article on Cardiff in "Architecture," is very complimentary on its group of public buildings in Cathays Park, but he perhaps does not feel free to express his views on the even more important point of the arrangement of those buildings on the site allotted to them. The City Hall and Law Courts were the first of these buildings and the outcome of one of the most successful competitions ever held, but this competition should not have been the first. The arrangement of the whole park should have been made the subject of an architectural competition, for as it is, this arrangement is obviously unfortunate and ill-considered. We believe that Messrs. Lanchester & Rickards offered valuable suggestions on the subject, which were over-ruled, and the treatment of the end of the park and its approaches from the city at either end are most unfortunately conceived. A cardinal defect is the placing of the University College of South Wales and Monmouthshire where it is. It should have occupied quite another site and have been approached from the central avenue. A minor point is the mistake of lining that avenue with trees in close conjunction with buildings. Trees may be good features, but there are too many of them, and in certain seasons they very largely hide the buildings which line the avenue. The cart has certainly been placed in front of the horse in the case of Cardiff.

The Albert Bridge, Datchet.

The Albert Bridge over the Thames near Datchet is to be demolished and a new bridge built in its place. The work will be begun in the course of the next few days.

The new bridge will be made of reinforced concrete and the third bridge of this material to be built over the Thames. It will be in the Renaissance style, but with squared rubble towers, to obviate conflict with the Norman architectural surroundings. The design, prepared by the county surveyors of Berkshire and Buckinghamshire, Lieutenant-Colonel J. F. Hawkins and Mr. E. Winfield, respectively, was personally approved by the King in March, 1915, and the bridge when finished will bear the Royal Arms. It will consist of two unequal span arches, that on the Berks side 75 ft. and that on the Bucks side 110 ft., with a centre cut-water pier 15 ft. wide, and is designed to carry all classes of modern traffic. The bridge will be built on the system of the Trussed Concrete Steel Company, Ltd., 22 Cranley Gardens, South Kensington, S.W.7, by Messrs. A. Jackaman and Son, of Slough, Bucks. The cost will be borne by the Ministry of Transport and the county councils of Berks and Bucks.

The original Datchet Bridge was built by Queen Anne in 1706. In 1795 it fell into decay and was partially demolished. After repeated agitation the counties of Berks and Bucks were compelled to reinstate the bridge, and it was opened again in 1812. When in due course it became necessary to strengthen it, the two counties could not agree on the design, and in 1837 the County of Berks rebuilt their side in iron, the Bucks side remaining wood, and the two halves of the bridge were clumsily joined in the middle.

New Session of the Royal Institute of British Architects.

The inaugural meeting, which will be opened by the President's address, will be held at 9 Conduit Street, W.1, at 8.30 p.m. on Monday, November 3.

The medal for the year 1923, which was awarded to Mr. Frank T. Verity, F.R.I.B.A., for the Shepherd's Bush Pavilion, will be presented to Mr. Verity.

The Ugliest Building in London.

Now that the R.I.B.A. awards an annual medal for the best building of the year in London in order to give encouragement to effort it would be most interesting to find out what architects think the ugliest building in the same area. We should like to see the experiment tried and to illustrate the results, and if our readers would help us by sending in sketches or photographs we will give the resultant Chamber of Horrors publicity. It is necessary to exclude from such a competition the work of those who now live among us, but we hope that such exclusion would not eliminate the best examples we are seeking for.

If our readers will give us any encouragement we shall hope, by the end of this year, to be in a position to give illustrations of examples and to comment on them. We may arrive at a right solution either directly by the choice of what is best or indirectly by finding out what is admittedly bad and avoiding them. It is also frequently illuminating to find out the degree of dislike which people feel for any given thing. Where our readers may not be able to send us photographs or drawings we may be able to get them if they will give us the requisite information.

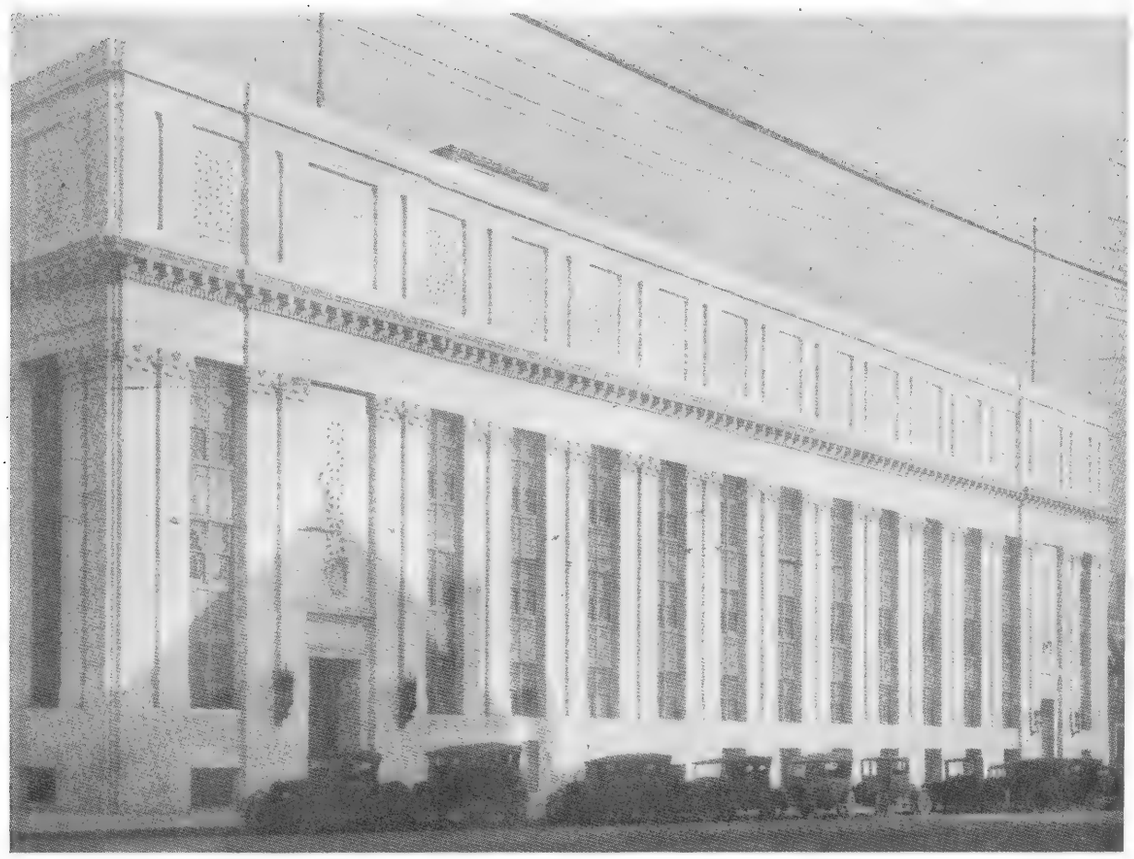
Legitimate Criticism.

In the Association "Journal" the criticism on Professor Richardson's book which appeared in "The Times" is reproduced. The close similarity between this and that which appeared in an architectural contemporary is so marked as to prove identical authorship. We could, we think, name the writer, but do not propose to do so. Anyway, not content to stop at demolishing Professor Richardson and his work the critic goes on in "Sensible English" to make misstatements on another architectural subject. He finds that Mexican architecture, though a hybrid, is a real regional development in which two alien civilisations alike in nothing but their furious enthusiasm for piling stone on stone originated a new manner of building. This is really very amusing, for it is common knowledge that the Aztecs, whom the Spaniards conquered, were not a great building people. It is to former races that the remains of Yucatan and Central America are attributable, and it is questionable if even these contribute sufficient grounds for calling the Mexicans a people who were inspired with a furious desire to pile stone on stone. Furthermore, a study of Mexican architecture—a good idea of which can be gathered from a copy of the monumental American work on the subject in the R.I.B.A. Library—will convince most architects that it is but a free colonial rendering of Spanish work of the same epoch of which the native craftsmen contributed here and there a few crude decorative features. The same kind of thing may be seen at Maçao, where Chinese workmanship was utilised by the Portuguese rulers, and will be seen everywhere where the work of one race has been executed by the people of another. But the architecture of Mexico is, in the main, no hybrid mixture but Spanish in essence. We should not labour this point unless the critic had not displayed his thirst for exact truths and unadulterated and pure English.

We can employ fine literary expression and the thunders of rhetoric, but is it really helpful if essential facts are wrongly stated? We should welcome any book which would give us representations of the notable buildings of any country or any locality and should not be inclined to criticise adversely because they were not radically unlike those of another province or another country. A work on the architecture of Gloucestershire would not be less valuable because we could trace close similarities between some of the buildings shown and those in another English district, but ours is a small country and admittedly we cannot show very radical local differences, a point which does not dispose of the fact that differences exist and give local character to architecture.

The Architectural Association.

Extracts from the President's Address.



PRINCIPAL FACADE OF THE MASONIC TEMPLE, BIRMINGHAM, ALABAMA.
WARREN, KNIGHT & DAVIS, Architects; HARRY B. WHEELOCK, Associated.
From the "Architectural Forum."

My lecture cannot contain any just judgment or certain prophecy: what yesterday has done was done too lately for us to see it dispassionately: what to-morrow will do we cannot see at all. The most that we can do is to observe, by comparing yesterday with to-day, what tendencies are at work among us; and to guess how those tendencies or expected reactions from those tendencies are likely to shape the future. Also, though we cannot foretell what will happen, we can decide in our minds what we think ought to happen, and, if we believe in architectural free will, we can resolve to spare no effort to make it happen. We can examine our habits of thought, and determine which of them we shall indulge and which of them we shall attempt to check. We can compare what the public wants with what we want the public to want and consider by what means we can persuade it to do so.

Designers of architecture, it must always be remembered, differ from practisers of the other Fine Arts in the kind as well as the degree of their dependence upon those who pay for their work. A painter or a writer can show to the prospective purchaser the goods he offers for sale. The architect can only show a drawing of them, which the prospective purchaser is apt to regard with suspicion, not perhaps unjustifiably. Moreover, very few people who employ an architect expect or desire from him a work of art, or indeed have any conception of what a work of art in architecture is. They think that they know what they want already, and would like best to obtain it directly from a builder, afterwards ordering the decorative features *à la carte* from a furnishing firm. They employ an architect only to guarantee the safety of the structure and of the drains, and to see that the builder does not charge too much. They bow to the necessity of his employment but regret it.

Now it is to such unwilling patrons as these that most of us owe three-quarters of our chances of doing anything at all. It is therefore not surprising that there should be heard, as there has recently been, a demand from architects for the architectural education of the public. No corresponding demand to be architecturally educated has yet been heard from the public, but we hope that it may come in time.

If and when it comes the problem will arise of who is to do the teaching. This ought, of course, to be the function of architects by deeds rather than of critics by words. But who is to pay for the instructional buildings, the buildings in advance of public taste?

I think that the experience of yesterday may help us to answer this question. A great number of the buildings of the last half century that we now believe to be the best ones have been paid for by people entirely indifferent to architectural appearances. Besides these, a few of the very best of all have been built by people of exceptional artistic perception and have been profitably imitated by others. Such gifted people still exist, but they mostly are too poor now to build anything, and it were vain to hope that any amount of architectural education could appreciably recruit their numbers from among the present holders of wealth. But there are still to-day among those who build—and heaven be thanked for it!—many people who have no taste whatever, and who do not care two straws what their building looks like provided it serve its purpose. For these the architect can do his best work, stimulated by his employer in his pursuit of efficiency, and unhampered by him in his pursuit of beauty. For these honest and blessed Philistines the architect can build the models which persons of taste will be as glad to imitate as they would have been unwilling to inaugurate.

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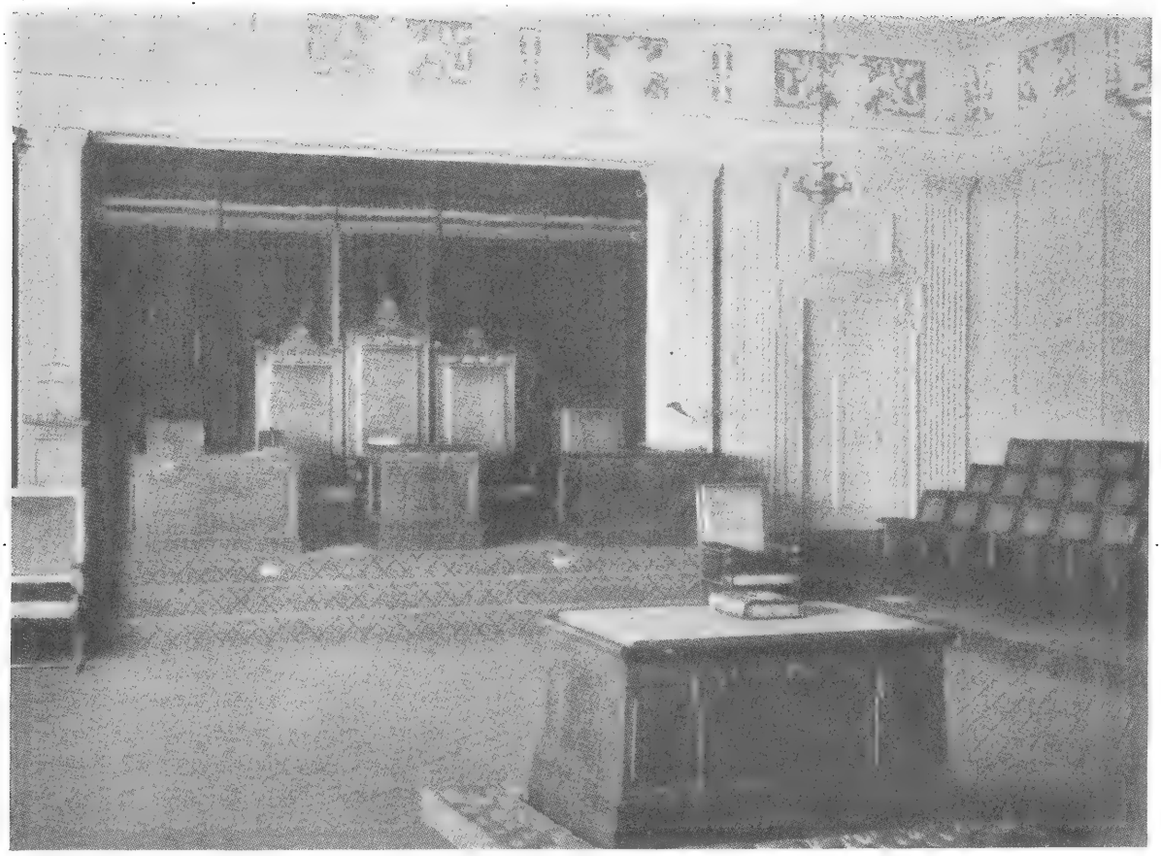
If I give no further example of the conventionality which has helped to put us architects out of sympathy with our employers, it is not because I cannot think of many more



DETAIL OF LODGE ROOM, MASONIC TEMPLE, ALABAMA.

but because I wish to speak now of a most serious fault on the other side, of a defect in public taste which if it grow rather than diminish may paralyse our art altogether. This is the sentimental devotion felt by people of to-day for the arts of the day before yesterday; the cult of the "antique," the creed of the "period" designer. In that really beautiful thing, the Queen's Doll's House, we are leaving to posterity a record, cruelly true, that when we wish to offer our best in architecture we offer architecture that is not ours at all. In two hundred years' time people will probably believe that it was made for Queen Mary II and brought up-to-date for her present Majesty. I do not suggest for a moment that this was avoidable, the Doll's House was intended to represent the most educated taste of to-day, and does so exactly. But I do suggest that the most educated taste of to-day wants a dose of something.

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Whatever its faults there is nothing that is imitation antique about the new Regent Street; nothing exactly like it has ever been seen before, and it is to be hoped that nothing like it will ever seen be again. I return to this thoroughfare because it seems to me in spite of its novelty to be peculiarly representative of those things of yesterday upon which we must try to ensure that to-morrow turns its back. Foremost among these I put its utter insincerity. I believe that very few of the buildings in it are residential, yet the façades of almost all of them are strongly domestic in character above the level of the shop-fronts. There is really no excuse for this since the one exception which my statement does not cover is that admirable building, on the west side, a few doors below Conduit Street, which had been put up several years when the present activities began. This building is a fragment of a design by Mr. Verity for the general rebuilding of that part of the street in which it stands. Had this design been carried out then tenants would have been housed as well as or better than they are housed to-day and London would have gained a beauty.

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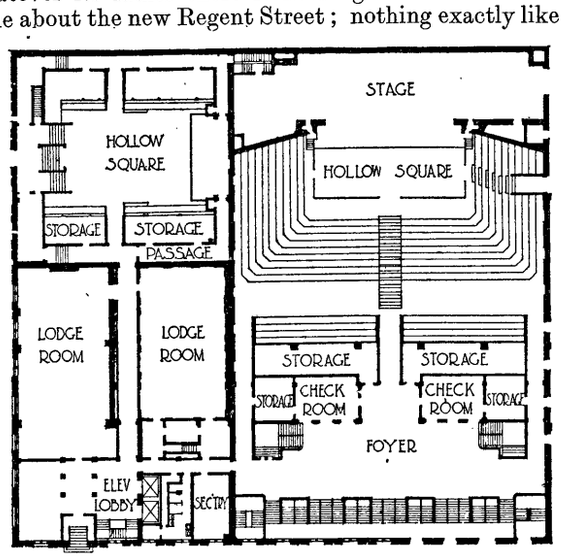
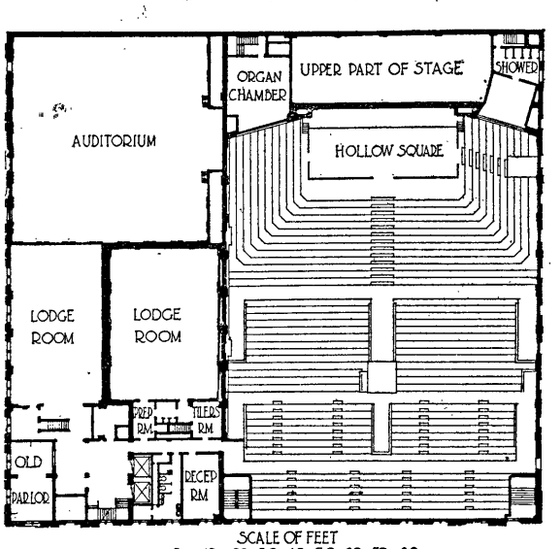
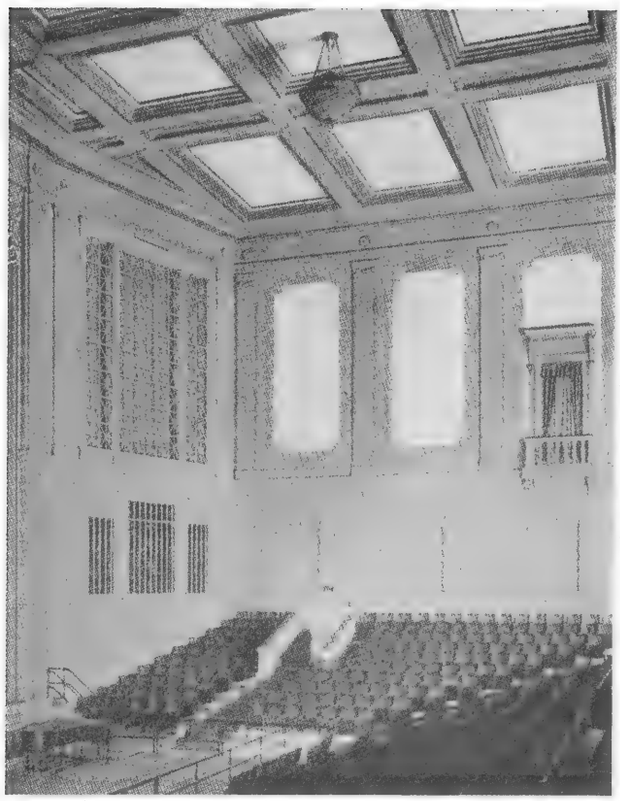


FIRST FLOOR PLAN



SECOND FLOOR PLAN

THE MASONIC TEMPLE, ALABAMA. Warren, Knight & Davis, Architects; Harry B. Wheelock, Associated.



AUDITORIUM AND MAIN ASSEMBLY HALL.

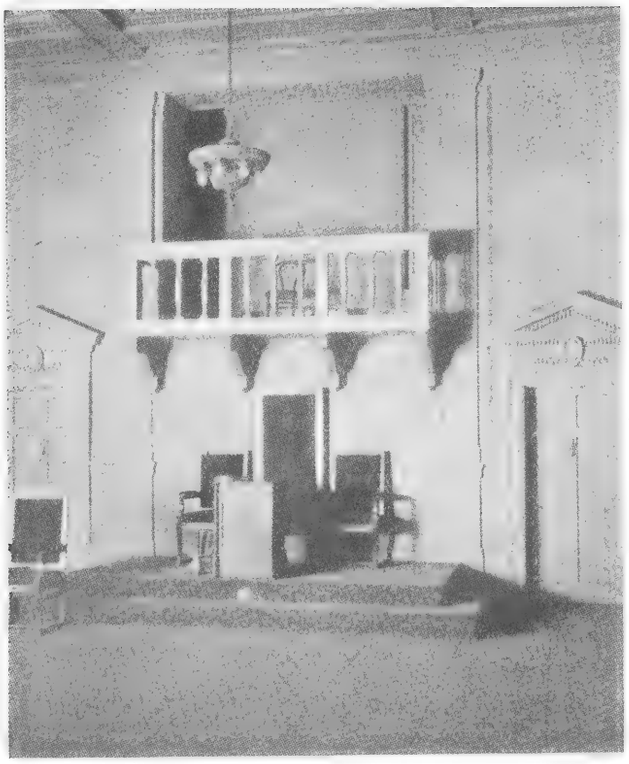
The one consoling feature in this lamentable failure of street building is the excellence of many of the shop fronts. That of the scent-shop on the east side above Oxford Circus is probably the most admired of any, and the obvious allurements of that of the Galaries Lafayette can also hardly fail to please and amuse us. Even the worst of them are not positively bad, and it is a pleasant task to compare them with the unpleasant memory of those in the old street which they replace. Shopfitting is an art which commerce compels to move with the times and although as practised in London it is still behind the standard of Paris, it is now greatly in advance of anything that we have had before. The shop fronts of the future will probably be even simpler than they have already become since traffic necessities are leading and will lead more and more to their being recessed rather than projected. The great change, however, which to-morrow will complete in the design of many storeyed shops, will be the final disappearance of that illogical distinction between shop front and super-structures which gives to such buildings as that of Messrs. Dickins and Jones the appearance of a block of municipal offices with the ground floor rented off. What the appearance of a many storeyed shop should logically be may be seen in the admirable new block of the Magasins du Bon Marché built at the corner of the Rue du Bac in Paris from the plans of M. Boileau.

In the design of London office buildings I doubt if to-morrow will see any great advance in essentials beyond the point reached in the best of the blocks in Kingsway. Portland stone has so many recommendations as a facing material in London that it is unlikely to be generally superseded even by faience. As time goes on it will probably come to be treated more frankly as a mere facing than it is at present; perhaps it may be allowed to appear as slabs affixed to the wall without bond, and bound and decorated with metal. However, this may be we can be sure that a great part of the customary bulk of stonework in our commercial buildings will disappear. Street fronts cannot be treated much longer as walls with holes in them when in reality they have become a series of holes divided by a structural framework. If convenience alone were considered few, if any, of the holes would be blocked with stone; glass or metal would be more eligible. The change from the wall with holes in it to the framework enclosing voids is analogous, if one compares big with little, with the change in Gothic art from plate- to bar-tracery. At present we are in transition, to-morrow we may hope to have fully accepted the consequences of modern construction.

BALCONY AND DAIS IN LODGE ROOM.

CORNER OF SCOTTISH RITE ASSEMBLY ROOM.

What to-morrow will bring forth in the way of housing many people would like to know. As this is not an election address I propose only to say a few words here about the housing which has already been done. I think that the people who write to the papers saying that England has been disfigured by the efforts which have been made already must be very hard to please. The architecture of the houses themselves varies of course from place to place;



TEMPLE ITALIAN RENAISSANCE DETAIL IN ONE OF THE LODGE ROOMS.

most of it appears to me perfectly decent and very little that I have seen is violently bad. Of the layout of the estates much more can be said; its average merit seems to me very high indeed.

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Unless the Bolshevist *régime* comes to England sooner than most of us expect it to do, I suppose that these new hamlets and suburbs will shortly need providing with buildings for educational and religious uses. The regulations governing the planning of schools, unless they are changed, provide for the future of this class of building so completely that there is nothing to guess in prophecy. Churches are in a different case, and the probability that a good many of them will have to be built before long will excuse me for telling here what I believe to be an unpleasant home truth. This is that there are very few men in England at the present time who are capable of designing a tolerable church. In the last century when the church building fever in this country was at its height, the routine church by the average architect may have been what we consider ugly, but it was competently designed of its kind and free from glaring or ridiculous faults. The routine churches, such as there are of them, which have been built in the first quarter of this century, seldom show evidence of any knowledge or experience on the part of their designers whatever. No doubt their faults are largely caused by the ecclesiastically supported convention that churches must be Gothic, a style which most modern architects have either forgotten or never known. But putting style apart, these new churches are still bad—bad in proportion, illogical in construction and inconvenient in arrangement.

There is, of course, no architectural reason why a church should be Gothic, and there are a great many why it should not when that style has disappeared from contemporary secular architecture. I do not myself consider that there is any ecclesiastical reason why a church should be Gothic, either; but there are a great many people who feel strongly that it should. The reason behind this feeling is the same which induced Archbishop Laud and others to preserve the Gothic style for the ecclesiastical purposes of the seventeenth century—people believe that the continuity of the present Establishment with the pre-Reformation Church in England ought to be symbolised to the eye by the traditionalism of her architecture. It may therefore well happen that the architects of many of to-morrow's churches will be commanded to design in Gothic. It will then be too late for them to repair the omissions of their mis-spent youth, and they will have to choose instantly between two alternatives —that of playing for safety in the "Earliest" style allowable, or covering their blunders in developed Gothic by proposing a "free treatment" of it. Whichever course they embark upon it is to be hoped that they will remember that the paramount need of modern congregations is to be able to see the altar without the use of a periscope.

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Be its style Gothic, or Classic, or Romanesque, or nondescript, a modern church should, I think, take the form wherever possible of a large hall with or without passage aisles. Transepts are an expensive luxury, since they are seldom of any use save as chapels, and for that purpose they are unnecessarily high. Whether there be added to this hall a full chancel or a mere sanctuary will depend upon whether there is to be a surpliced choir or whether the music is to be provided for from a western gallery. It cannot be denied that this hall-like form is not a cheap one, unless we are to forego our normal notions of fit architectural proportion and make it very low. With modern facilities of ventilation, there is no practical compulsion to make such a hall of more than an average height of twenty feet or even a little less; and it will be difficult to be content with this height for a space of about forty feet span. I suggest, therefore, that the really cheap church of to-morrow will probably be roofed by two or three parallel spans, and be divided accordingly by posts on their pillars on the ground plan. In some circumstances wooden posts will do very well, in others there may be an especial suitability in slender arcades of stone after the old model. Where the material is reinforced concrete there will be stanchions which perhaps may be faced with mosaic, faience or even marble. Where the material is reinforced concrete another new possibility in church architecture will arise—it will no longer be necessary to distribute the lighting area of glass into definite windows but it will be open to the architect to pierce the walls and roof of his structure with glazed holes grouped and arranged in patterns however he chooses. If I had a lantern to-night I would show you a remarkable experiment in this direction made by MM. Perret in their new concrete church at Le Raincy where coloured glass is spread from rib to rib over the whole east wall like immensely magnified enamel *à jour*. Mr. Fletcher tells me that he has recently seen another concrete church in France where the idea is carried even further. The possibilities of reinforced concrete in church building are indeed limitless to our present vision, and it will be interesting to see whether our national conservatism allows of their exploration to-morrow or whether we must wait for that to the day after.

Ere I leave the subject of church architecture, I must lay my tribute before that magnificent design which Sir Giles Scott has now partially realised at Liverpool. It is not my intention to offer any criticism of this astonishing cathedral, with the beauty and peculiarity of which you are all familiar. Many to-morrows will probably pass before a like opportunity of Gothic building arises, and when and if the opportunity does arise it is probably that new methods of contruction will have closed the Gothic books for ever. By that time we may hope that the great hill at Liverpool will be crowned by the entire building as imagined by its creator, a worthy monument of his genius and of the century which conceived it and brought it into being.

In proposing a vote of thanks to the lecturer, Mr. H. M. Fletcher said, although the lecture was entitled "Yesterday and To-morrow," a great deal of it dealt with to-day. All yesterdays had been the to-morrows of farther back yesterdays, and their to-morrow would in its turn become a yesterday. The conclusion they could draw from that was that the line of development was usually similar throughout the ages, and that in order to build to-morrow they must build upon yesterday. He was very much interested in the reference to the concrete church at Le Raincy, which he had visited just previously and which he

CONCRETE CHURCH AT RAINCY, FRANCE: SHOWING THE CONCRETE TRACERY OF WHICH PRACTICALLY THE WHOLE OF THE WALLING IS FORMED.

thought a very fine piece of pioneer work, impressive in a way, but still groping. The plan of that church was a traditional church plan of nave and aisles, but the aisles were only separated from the nave by thin reinforced concrete posts. The effect of the church might be likened to a birdcage, for three of the sides were formed of very light tracery in concrete and filled in with glass, that seemed to be what Gothic builders tried to do, but could not, because the stone had not sufficient tensile strength and they were obliged to use great buttresses outside. The external walls were simply a series of articulations with glass between and with no projections on them at all. The interior of the church was very impressive. The coloured glass of which the walls were chiefly composed made the interior a blaze of colours. After referring to another concrete church in France, Mr. Fletcher said he thought everybody who cared for the to-day and to-morrow of architecture should keep their eyes on France. It seemed to him there was more hope for the future in slow development and elasticity than in violent methods of change noticeable in Holland and the Teutonic countries.

Mr. Austen Hall said he was rather alarmed at the description of the church at Le Raincy, for he doubted if English people would feel at home if surrounded by glass.

Mr. Gilbert Jenkins said he did not think present tendencies in architecture were indicative of any drastic change, but that the process of evolution was going on and it had simply happened to be rather striking at present owing to the time lost during the war, which meant that time had to be made up in a hurry.

Mr. Matthew Dawson said he did not agree that Decimus Burton's arch was spoiled by the quadriga which surmounted it; it simply pointed the moral that if sculpture were added to the framework in a proper manner there would be a future for it. He did not think the architects of the concrete churches in France came from the Ecole des Beaux Arts, but from the School of Viollet le Duc.

Mr. Manning Robertson said that in dealing with concrete churches or other buildings, they got much the same type of structure as with steel, if they reasonably followed and properly used the material. He thought the Palm House at Kew a very fine building, but he did not admire Cannon Street Station as architecture; both these were built of steel, and in the same way reinforced concrete structures could be beautiful if the material were properly handled.

After a few remarks from Mr. Stanley Hamp, Mr. Goodhart Rendel briefly replied and the meeting then terminated.

The Remodelled Masonic Temple, Birmingham, Ala.

WARREN, KNIGHT AND DAVIS, Architects; HARRY B. WHEELOCK, Associated.

An architect meets few problems more difficult to solve than the remodelling of a building, especially where occupancy continues during the work. Such was the case with the Masonic Temple at Birmingham, Alabama, where the original building, occupying a corner lot 50 by 100, was kept almost intact and used for Masonic purposes during the operation of remodelling and enlarging the building to occupy a lot 175 by 190.

The first plans, which showed new wings on both sides, left the original building unchanged. But before bids were received on the first scheme, the architects persuaded the owners to make the completed work appear as a single building. For the sake of sentiment and because of other reasons it was decided to leave the old building practically unchanged as to interior plan. As it was undesirable to repeat the type of design of the exterior of the old building in the new addition, the original front was changed to conform to the new design and to make the entire exterior of uniform appearance. The preserving of the interior plan of the old building and making a new exterior to give the effect of a single building was a difficult problem. The width of the bays on the two street fronts of the building as well as the storey heights, had to be preserved. This was accomplished by the use of double pilasters and a high entablature and attic, executed in severe Classic detail. As the entrance at the centre of the old building had to be retained, a second entrance to balance it was placed at the other end of the main facade.

Although the various rooms and auditoriums of the interior remained unchanged in plan they were completely built over and given an architectural, decorative treatment in harmony with the Classic character of the present transformed exterior design.

L.M.S. Research in the Lighting of Railway Stations.

An interesting feature of the re-lighting arrangements now being installed at New Street Station, Birmingham, is the long-distance control in connection with the gas lamps. By means of this control—a convenience hitherto usually associated only with electric lighting—lights can be turned up or extinguished from one central point.

The present scheme is the outcome of long and careful inquiry by the London Midland and Scottish Railway as to the most suitable illuminant for railway stations—an important problem on a system which possesses more than three thousand of them.

In this case the choice lay between electricity and high or low pressure gas, and it was eventually decided to use low-pressure gas for the platforms, yards and subways, and electric light for the offices and waiting rooms. The gas lamps embody the principle of superheated clusters of small inverted mantles, which, in the station itself, will be suspended from the roof tie-rods, thus dispensing with obstructive lamp standards on the platforms.

CARLISLE.—The Borough Surveyor, reporting on housing possibilities under the new Act, estimates that 800 houses could be built in the next two years by the Council and that 80 might be provided by private enterprise. He suggests the preparation of a scheme for 300 houses and states that he has been informed that Messrs. Laing will undertake to erect 100 by next June, 100 by September, 1925, and 100 by December, 1925. The scheme for the erection of 800 houses within the next two years has been approved.—Land at Blackwell is to be acquired compulsorily for housing purposes.—Plans passed: house, Dykes Terrace, for Mr. H. Irving Graham; monumental work, Warwick Road, for Messrs. Benwell & Slack; 14 garages, St. Paul's Square, for Mr. W. C. Johnson.

GLOSSOP.—Plans passed: photographic studio, High Street, for Mr. Entwistle; alterations and additions, Station Mills, for Messrs. Wilman & Sons.—Newshaw Lane is to be widened at a cost of £6,400.

GUILDFORD.—Plans passed by Town Council; extensions to workshops, Friary Street, for Messrs. Foster & Sons; additions, 86, High Street, for Conservative Club; additions, Royal County Hospital, for Messrs. Hodgson Lunn & Co.

The New President of the Society of Architects.

Mr. Alfred John Taylor, the new President of the Society of Architects, was born at Bath in 1878. In 1902, after having been successively pupil and assistant to the late Major Charles E. Davis, F.S.A., the city architect, he set up in practice on his own account. During that time he assisted Major Davis in a comprehensive scheme of excavation undertaken on behalf of the Corporation of Bath to lay bare the Roman Thermae in that town. Mr. Taylor was therefore connected with this work throughout its busiest and most important period. Since the death of Major Davis he has been entrusted by the Corporation with the care of the present remains. Recently he has uncovered further portions of the Thermae, hitherto unknown,

ALFRED JOHN TAYLOR, P.S.A.

about which particulars are expected to be published shortly. Mr. Taylor, a very keen antiquarian, is the author of the Catalogue of the Roman Remains. In addition to his antiquarian work Mr. Taylor has an extensive architectural practice which is by no means confined to his native city. He is architect to the Baths Committee of the city of Bath and has made the planning of hydropathic establishments a speciality, making numerous visits to most of the Continental Spas with whose methods he has made himself entirely familiar. He is also responsible for the medical and swimming baths at Torquay and Leamington Spa, and is at present engaged on similar works at Malvern. Connected with this branch of his practice is the great number of hospitals which Mr. Taylor has to his credit, such as the series of buildings for the Forbes Fraser Hospital at Weston, Bath, recently opened by the Duke of Connaught. At the moment Mr. Taylor is engaged on similar buildings in Wiltshire. Mr. Taylor is also the author of a number of industrial buildings, city halls, concert pavilions, cinemas, restaurants, hotels, etc., besides numerous examples of domestic work in Somerset and the surrounding counties, and also in South Wales. He is also the architect for the city housing schemes of about three hundred houses. In addition to all this Mr. Taylor is a speciality in the branch of the profession which rarely comes within the scope of the general practitioner, that is to say the planning of race-courses with their adjacent buildings. Among the works of this kind executed by Mr. Taylor, those at Newbury, Bath, Salisbury, Bournemouth and the projected scheme at Chepstow are the most important. Mr. Taylor is a Fellow of the Society of Architects and of the Institute of Arbitrators.

City of Leicester School of Arts and Crafts.

(*Principal*—John Platt, A.R.C.A.)

ONE OF THE CRAFT CLASSES OF THE ABOVE SCHOOL.

The Department provides courses of instruction for architects, builders, clerks of works, structural engineers, bricklayers, carpenters and joiners, plumbers, and painters and decorators.

The course for architects has been arranged in conjunction with the Leicester and Leicestershire Society of Architects, and in accordance with a syllabus drawn up by the Board of Architectural Education of the Royal Institute of British Architects. Provision is made for a preliminary training in day classes for two years and for further training in both day and evening classes during and after pupilage. The Council of the Leicester and Leicestershire Society of Architects, the head of which is George Nott, A.R.I.B.A., recommends that all candidates for the profession should pass through this two years' preliminary course, at the conclusion of which an examination is held to test the student's knowledge of the history of architectural development, simple design, the principles of construction, the nature and properties of building materials, including reinforced concrete. Students passing this examination will be granted the diploma of the Department of Architecture of the School. The Department is in close touch with the local Society of Architects, and has on its advisory Committee the president and three past-presidents of the Society. Arrangements have been made with the Council of the Society for whole-time students to spend about one half of the summer vacation on building works in progress, so as to enable them to become conversant with modern building methods in operation. The principle underlying the instruction given is that construction is the basis of architecture, and the teaching of design and the history of architecture is undertaken from this point of view rather than from the standpoint of archæology. Drawing is cultivated as a means of expression and presentation. The teaching of architectural design is regarded as inseparable from that of construction, and in the conditions of the local prize for design, students are required to submit their calculations of stresses, together with full details of the construction proposed. The course is so arranged as to steadily prepare students for the examinations of the Royal Institute of British Architects.

The course for builders, clerks of works and structural engineers is established with the object of providing a sound, scientific, technical and practical training. Great importance is attached to the study of the scientific principles of construction, the nature, properties and testing of building materials, and to the necessity of a thorough and complete understanding of working and detail drawings. Students in this course attend the same classes in the above-mentioned subjects as the architectural students and, on the other hand, they are required to attend practical and theoretical classes in brickwork, carpentry and joinery and plumbing.

The courses for bricklayers, carpenters and joiners, and plumbers are attended by indentured apprentices to the trade for theoretical and practical part-time day and evening training. Careful consideration is given to the practical application of the studies to the requirements of each trade. Organised and progressive courses of study are provided for post-apprentices, enabling them to become foremen and to qualify for the full Technological Certificate of the City and Guilds of London Institute, and also, in the plumbing classes, to prepare for the examinations of the Worshipful Company of Plumbers qualifying as "Registered Plumbers."

The course for painters and decorators provides instruction for Junior Craft students taking the two-years pre-apprenticeship course. These students are instructed in the fundamental principles involved in the preparation and finishing of various kinds of work, so that they may have an intelligent idea of the part they are to perform. Part-time day classes for apprentices are held during the four winter months of the session. Colour work and other practical exercises which can be better taught by daylight are given precedence. Evening classes for apprentices and journeymen are held during the six winter months. Instruction is given in the principles underlying the practice of the craft, and it is not intended to compete with workshop training, but to amplify it. Attention is specially directed, therefore, to filling up the gaps in craft knowledge, which may be individually necessary owing to the present tendency towards specialisation in the different workshops. Students are prepared for the National Painters' General Competition, the Diploma of the City and Guilds of London Institute, and the Associateship of the Institute of British Decorators.

The School recognises the vital importance of raising the standard of craftsmanship, not only in the various branches of the building trade, but throughout the whole of industry. Better craftsmen will be better citizens.

BRICK LAYING.

CARPENTRY AND JOINERY.

SIGN WRITING.

PLUMBING.

CITY OF LEICESTER SCHOOL OF ARTS AND CRAFTS.

DORLAND HOUSE, REGENT STREET. J. J. Joass, Architect.

Dorland House, Regent Street.

The demolition of John Nash's mansion, which occupied the corner site of Regent Street and Carlton Street, marks another step in the transformation of London's architectural map; a change from the picturesque to the practical. No longer can a private individual afford to maintain large residences such as that built by John Nash, for since his days the property in this particular sector of the metropolis has increased one thousand per cent. in value.

Dorland House will be a distinct addition to the architectural amenities of reconstructed London. The ground floor consists of a multi-windowed showroom with entrances on two sides.

There are eight open floors and basement with window light on four sides, susceptible to any scheme of sub-division to suit tenants' own requirements. The building embodies every modern convenience and structural improvement.

It would be impossible to conceive a position of greater prominence and prestige in the whole world than Piccadilly Circus, which will in the course of a few years be entirely transformed into one of the finest architectural centres in Europe.

Mr. J. J. Joass, F.R.I.B.A., was the architect.

The general contractor was F. G. Minter, Putney, S.W.6. The steelwork was carried out by Messrs. Moreland, Hayne & Co., Ltd., 80 Goswell Road, E.C.1; Messrs. Kleine Patent Fire Resisting Flooring Syndicate, Ltd., 133-136 High Holborn, W.C.1, carried out the floors and roofs; the lifts were fitted by Messrs. The Berkeley Electrical Engineering Co., 10 Davies Street, W.1, and the lift enclosures were manufactured by Messrs. Crittall Freeman Bronze, Ltd., 246 High Holborn, W.C.1; the heating plant was installed by Messrs. Rosser & Russell, Ltd., 37 Duke Street, W.1, and the radiators were supplied and fitted by Messrs. National Radiator Co., Hull; the lead castings were executed by Messrs. H. H. Martyn & Co., Ltd., 5 Grafton Street, W.1, whilst Messrs. Crittall Manufacturing Co., Ltd., 246 High Holborn, W.C.1, fitted their casements; all the asphalte work was done by Messrs. Lawford & Co., Bow Bridge, E.15; the stone carving was executed by Messrs. E. J. & A. T. Bradford, 62a Borough Road, S.E.1; from the architect's designs the pavement lights were supplied and fitted by Messrs. J. A. King & Co., 181 Queen Victoria Street, E.C.4; the sanitary fittings are by Messrs. Shanks & Co., Ltd., 81 New Bond Street, W.1, and are representative of their well-known quality; the electric lamps are of the Mazda Lamps pattern supplied by Messrs. The British Thomson-Houston Co., Ltd., Crown House, Aldwych, W.C.2.

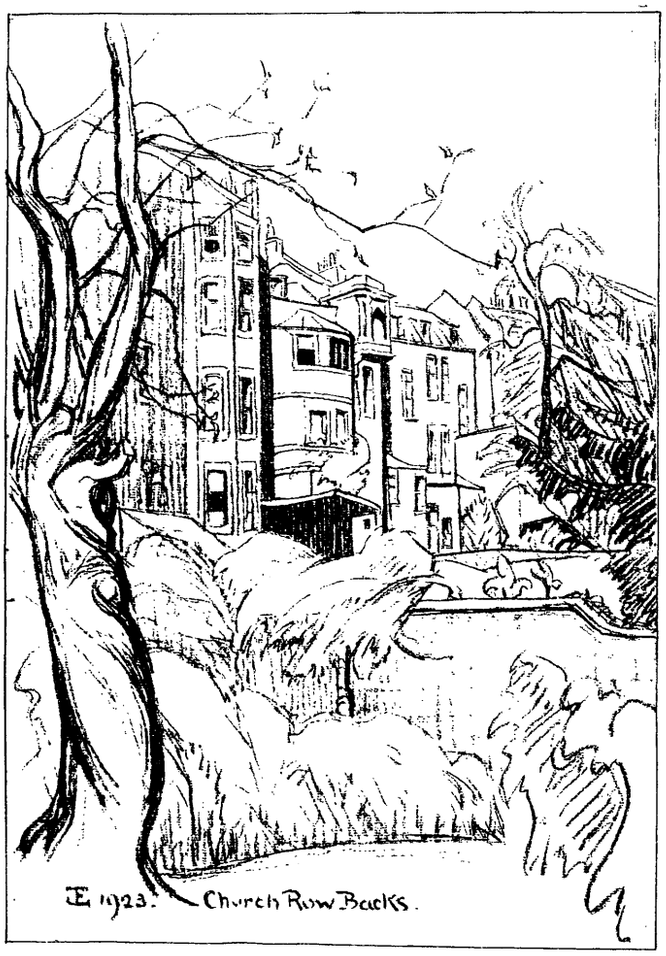
Bradford.—Estates are to be developed by Messrs. Croft & Keighley at Idle Road, and the Pendragon Estate Co. at Bolton Road, Idle Road, and Pendragon Lane.—Plans passed: 8 houses, Intake Road, for Messrs. Canfield & Sons; 8 houses, Parkside Road, for Co-operative Society.—The Ministry of Health have sanctioned the White Abbey clearance scheme.

R.A. 1924.

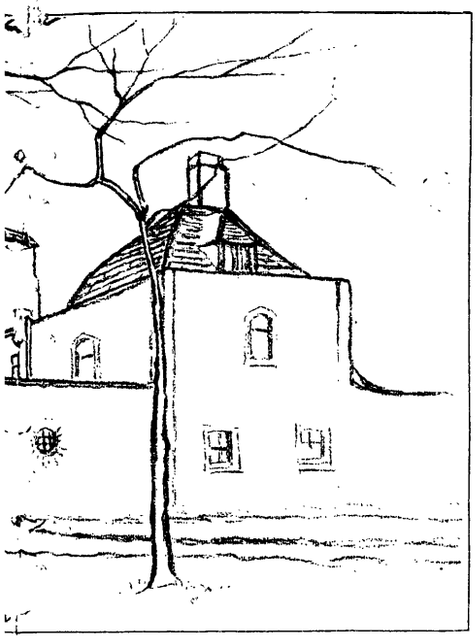
"INK-PHOTO." Wm BROWN & CO. LTD LONDON, E.C.3.

"IVORIES," COWFOLD, SUSSEX.

W. H. BRIERLEY & J. H. RUTHERFORD, ARCHITECTS.


E. 1923. Church Row Backs.

On Judges' Walk



"INK-PHOTO" WM BROWN & CO. LTD. LONDON, E.C

D. By Miss J. E. TARRING.

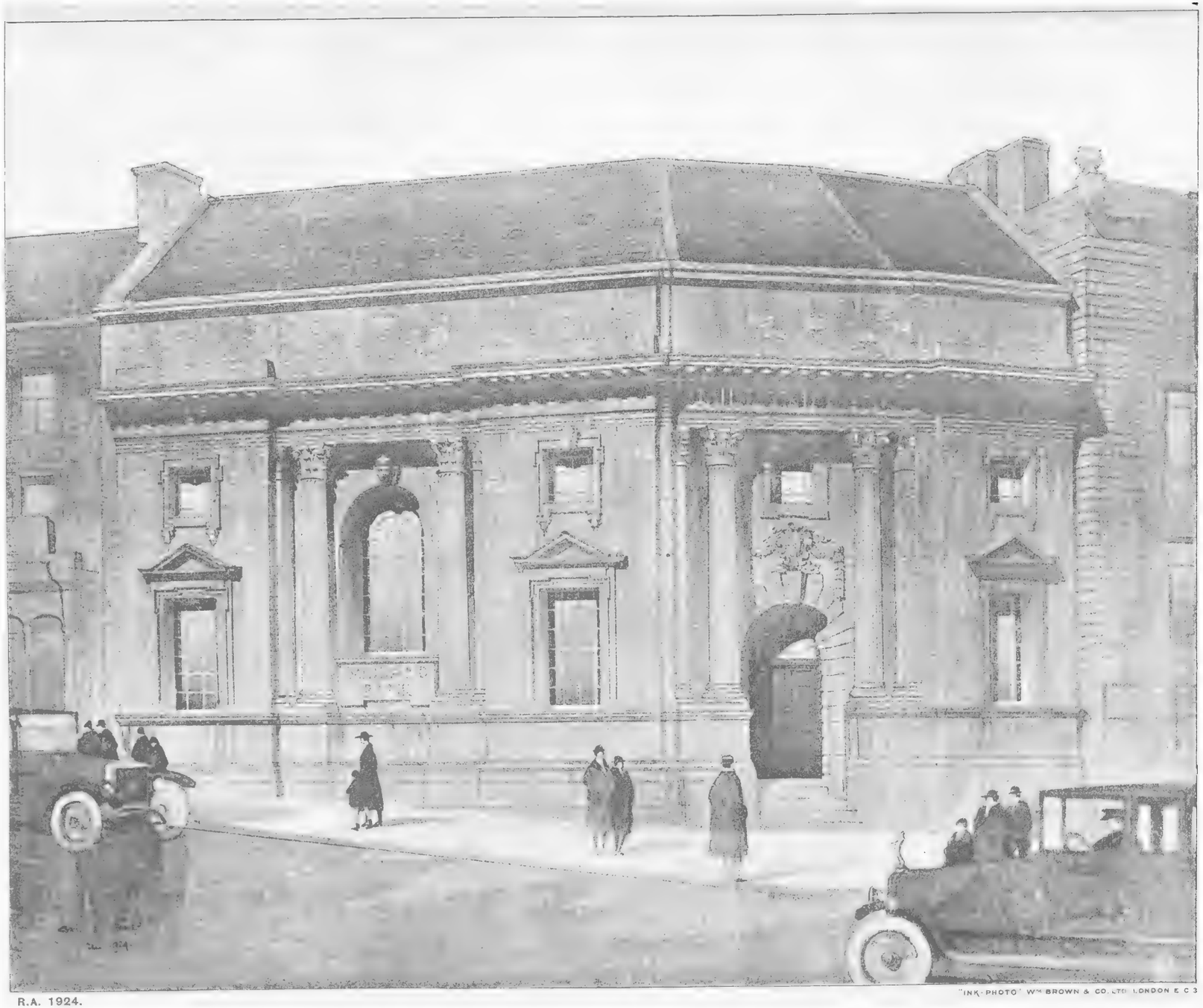
THE HALL OF HIS EXCELLENCY THE

HERBERT BAKER.

"INK-PHOTO" WM BROWN & CO. LTD. LONDON, E.C.3.

GOVERNOR'S RESIDENCE, PRETORIA.

R.A., ARCHITECT.



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NEW MIDLAND BANK PREMISES, DARLINGTON.

W. H. BRIERLEY & J. H. RUTHERFORD, ARCHITECTS.

Mediæval Town Planning.

Second Lecture by Professor William Haywood at the Birmingham University.

The period of conquest which followed the year 1000 A.D. in Europe led to the building of many towns of an almost exclusively military character. The first Norman towns of England; the Bastide towns built in Provence by Louis IX to wear down the resistance of the Albigensians; and the English towns of France and North Wales built by Edward I., all illustrate the predominant character of the time.

It is only here and there that we find the building of cities undertaken solely for residential and commercial purposes; and of such towns Salisbury, Hull and Winchelsea, in England, and Carcassonne, in Provence, are examples.

The new Salisbury was built because the inconvenience of the old hill city was too great a handicap for its inhabitants in time of peace. In 1220 A.D. Bishop Richard le Poer built a new city in the rich meadow lands south of old Sarum; for the greater convenience of his flock, and with the uncharitable object of diverting trade from the flourishing borough of Wilton, three miles to the west. The plan was of the chequer-board type; there were no defensive walls; the waters of the Avon encircled and protected the town; and the spacious streets—each with a central stream of running water—were unusually attractive. Hull was built by Edward I as a port to the city of York, and to replace Ravenser, which, by the erosion of the east coast, was threatened with destruction.

The new Winchelsea (originally Iham) was built by Edward I in 1281 to replace old Winchelsea. The king assessed the new town very heavily; and it was not until the sea threatened the old town with complete destruction that its people yielded to this compulsion, and an abatement of the original terms. A few of the original 39 insulæ still remain.

The lower town of Carcassonne was built by Louis IX in 1247 without walls, because the king wished to house an industrious and useful people, while depriving them of the means to resist his authority. The town still retains the chequer-board pattern of its original plan.

This consideration of ancient towns which have been planned outright would be incomplete without reference to the inconvenience and monotony of the square mesh arrangement of streets which was almost universal down to the sixteenth century, and which has persisted in many places—notably in America—until to-day. The chief inconvenience of this arrangement arises from a lack of roads in a diagonal direction, the need for which is apparent from the vast and costly schemes of alteration imposed upon modern American towns in order to make good this deficiency.

Ancient towns were usually so small in area, and the traffic needs were of such a kind, that the need for diagonal routes was probably not felt; but whether the town be large or small, the gridiron type of design is inconvenient and costly on hilly sites. Its character is monotonous, and it is directly opposed to an adequate architectural treatmen of town forms. Many mediæval towns with apparently no regularity of plan, and even an appearance of confusion, will be found well adapted to local topography and far more convenient and pleasant to live in than towns which have a greater appearance of utility because their plan is highly artificial.

Renaissance Town Plans.

Third Town Planning Lecture at the Birmingham University by William Haywood.

The renaissance of classical literature in the first years of the fifteenth century A.D. coincided with a loosening of feudal and Church control. New ideals were formed. Old ideals were studied and imitated.

Literary reference to the structure of Ancient Rome led to archæological research, chiefly for the practical purpose of assisting fifteenth century architectural ambitions, which in Florence had advanced beyond the technical ability of the times. Brunelleschi, 1377-1446, made first use of this new interest in Old Rome and studied ancient vaults and domes in order to complete the cathedral of Florence.

The new social order expressed itself in great secular buildings, of which the Riccardi Palace (1430) and the Pitti Palace (1440) are early examples. Important buildings were planned in axial relation to their environment; in towns, as a climax to neighbouring streets or squares; in the country, associated with formal garden effects of a scale and character clearly prophetic of a new order in town planning.

Rome followed Florence in the new progress. Pope Sixtus V (1585-89) restored the water supply, and so made large areas of the upper town habitable which had lain waste since the destruction of the aqueducts. His architect Fontana planned new roads for the development of the abandoned areas, and his arrangement of the Piazzi del Popolo is notable as the first example in history of a public place at the entrance to a city, so associated with diagonal routes as to facilitate the direction of traffic to and from widely separated sections of the town. This Piazzi is essentially a traffic centre, and, as such, initiates a new use for public squares, which, from this time onwards, become less exclusive in character until they lose all sense of enclosure and become mere road widenings for the convenience of traffic distribution.

Fontana's planning for Rome in 1589 preceded Wren's plan for the rebuilding of London by 77 years, but, although Fontana introduced a new factor into road design and also conceived his roads and public buildings as parts of the same composition, yet his projects were never welded together as one scheme, and it was reserved for Sir Christopher Wren, with his design for the rebuilding of London in 1666, to conceive the first town plan in which all sections were suitably co-ordinated.

Wren took no hint from Paris, for at this time Paris had taken no step forward in town planning, her present eminence in this respect being due to a long process of sectional improvement, with Haussmann's linking up devices of the mid-nineteenth century to give cohesion to the whole. It is the more remarkable therefore that Wren should have so anticipated present practice that his plan stands equal with the best town planning of to-day.

Book Notes.

"The Civil Engineers' Cost Book." By Col. T. E. Coleman, O.B.E. (London: E. & F. N. Spon; New York, Spon & Chamberlain, fourth edition, 10s. 6d.)

This work has made a reputation for itself upon past editions, and such reputation should be maintained by the present issue. There is, of necessity, one disadvantage attaching to all such works, and that is, the fluidity of the prices. For just as a price book of nutrients (were such to be produced) would be untrustworthy as regards the prices of milk and bread, and other items of the breakfast table, so too is it with prices of other commodities.

Thus it is that such works as the one now before us exhibit their value in the establishment of the prices as current at the time of preparation, and even more value in the useful notes and memoranda accompanying the various items. In regard to brick aqueducts, the most recent is, we suppose, that carrying the extension of the Hampstead and Highgate Railway from Golders Green.

May we ask, in our ignorance, what a "*rubbish*-pulley" is? (page 9). A curious error of the author's is to confuse the use of the terms "yards cube" and "cubic yards"; it was by such juggling as this that the British pioneers in America cheated the Indians out of their land; it is not suggested, for a moment, that Col. Coleman is a wilful offender, but to write of "3000 yards cube" gives a result of 27,000,000,000 cubic yards. We would point out that in electric parlance a B.T.U. is so many (1,000) watt-*hours*, not *watts*.

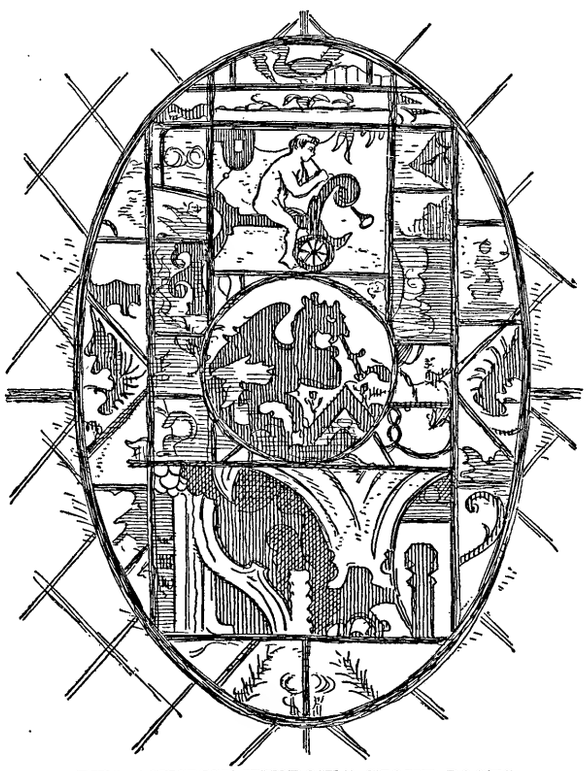
The repetition of the hydraulic memoranda in two parts of the book is quite a good idea, but there is an unfortunate compositor's error on page 142, regarding a gallon of water, where 16 cubic feet should read 0·16. The book, as a whole, is decidedly to be welcomed.

WHITLEY.—The architect is to prepare amended plans for cottages at the cemetery.

GLASGOW.—The Scottish Board of Health have sanctioned a two million loan for housing.—The Baptist Union has selected a site at Corkerill Road for the erection of a church.

A Curious Stained-Glass Window.

The once completely rural church of Stoke Poges, closely associated with the poet Gray and his "Elegy, written in a country churchyard," is to be repaired rather perhaps than "restored." Appeals have been sent out to the Press, and considerable notice has been taken of them. Thomas Gray himself lies outside the east end of the church, whose churchyard, not now so modest as of old (being crowded with ornate white marble monuments), is yet picturesque. A curious feature of the church, and one generally shown to visitors as the "Cyclist Window," is seen in the cloister approach from the former residence of Thomas Penn, a son of the founder of Pennsylvania. This approach, leading to his private pew, is lighted by a window constructed about 1642, in which is inset a strange medley of stained glass fragments. Among these is seen prominently the figure of an angel bestriding what looks like an old "hobby-horse," the precursor of the bicycle. He is blowing a horn. The significance of this curious little figure is not obvious, but it may be some allusion to the Book of the Prophet Ezekiel, in which, among the dreadful tribulations narrated and prophesied, there is an amazing deal about wheels of all kinds.



THE "CYCLIST WINDOW," STOKE POGES.

Gray, who died in 1771, and lies, as already mentioned, at the east end of the church, is buried with his mother and his aunt. He was an incorrigible bachelor. His tomb, of the "altar-tomb" type, of brick and stone, is simple, and indeed, with some of the surviving characteristic Middlesex, Hertfordshire and Bucks modest timber grave-boards, is almost the only one left of the simple memorials of an earlier day. The stone cenotaph erected to the poet's memory by the roadside, by John Penn, of Stoke Park, is, frankly, an extremely ugly affair. It should be added that, although by popular ascription this churchyard of Stoke Poges is said to be the one referred to by Gray in his "Elegy," it is by no means certain that this is the case. He did not ever state it to be so, and there are not wanting those who believe the churchyard of Upton Royal, nearer to Windsor, Eton and Slough, to be the place meant. The whole district was, however, familiar to Gray, who often refers to it, and especially to Burnham Beeches, in his intimate correspondence. CHARLES HARPER.

NEW MALDEN.—Plans passed by Maldens and Coombe U.D.C.: 8 houses, Eton Avenue, for Mr. E. Hayes; 6 houses, Albany Road, for Messrs. Bailey & Dudley.

"The Architect" Fifty Years Ago.

OCTOBER 31, 1874.

THE COMING SESSION OF THE ARCHITECTURAL SOCIETIES.

The Architectural Association, as we may remind those of our readers who know and inform those who do not, is a private society which, properly speaking, is *the Junior Institute* No idea of interfering with the functions of the senior body is involved in its constitution; the utmost harmony fortunately prevails between the two institutions; the older men of the Association are identical with the younger men of the Institute; and the great bulk of the members of the junior body are simply the assistants and pupils of London offices. The Institute, on the other hand (perhaps we ought to say on the other storey, for the two establishments are amicably domiciled at No. 9 Conduit Street, one above the other), is, by Royal Charter, the Guild of the Architectural Profession in the United Kingdom. Its membership is by law the right of every respectable practitioner of so many years' standing who chooses to apply for admission through the prescribed ordeal of a ballot; and, speaking in general terms, its rolls contain the names of all those who can be conveniently accommodated.

The difference between the work of the seniors and that of the juniors is thus perfectly easily understood. The one society has to protect and promote the pursuit of advanced architectural knowledge and to watch over professional interests and aims; the other has to cultivate more elementary architectural study and to aid the process of preparation for practice.

General News.

BEXHILL.—Tenders are to be invited for the erection of 10 houses on Little Common estate.—The Borough Surveyor is to prepare a layout of the London Road land for further houses.

BIRKENHEAD.—Plans passed: two streets, Bidstone Avenue estate; 16 houses in new street from Alderley Avenue to Woodsorrel Road.—Land at the Park High School is to be levelled at a cost of £3,750.

BRENTFORD.—The Housing Committee recommend the subsidy in respect of 20 houses to be erected by Messrs. Steel in Church Walk.—Plans passed: 20 houses, Church Walk, for Mr. Davies.

DOVER.—Extensive repairs and alterations are to be carried out at the Barton Road school.—Detailed plans are to be prepared for a shelter at Granville Gardens with seating for 700 and estimated to cost £2,500.

EASTBOURNE.—Plans have been submitted for the development of the Chatfield estate.—The Borough Surveyor has prepared a layout plan for a new depot at Bedfordwell Road.

EAST HAM.—Plans passed: 4 houses, Melford Road, for Mr. Seymour; 14 houses, Cotswald Gardens, for Mr. F. Hamlett; 44 houses, Caulfield Road, for Messrs. Gale Bros.—A scheme for extensions at the dust destructor works, to cost £10,000, has been prepared by the Borough Engineer.

LEICESTER.—The Town Council propose the acquisition of a site in Aylestone Drive for a transformer house.

LUTON.—Revised plans have been prepared for the erection of a fish market.—Plans passed: 4 houses, Colin Road, for Mr. A. Carter; rebuilding warehouse, Silver Street, for Mrs. C. Horn; 4 houses, Biscot Road, for Mr. W. D. Dyer; factory extension, Alma Street, for Messrs. Heley & Hudson.

MORECAMBE.—Plans passed for 48 houses, Silverdale Street, for Messrs. Edmondson Bros., Ltd.—The improvement of the Marine Road is to be undertaken in conjunction with the Heysham U.D.C.

SHIPLEY.—The Urban District Council propose the erection of a smallpox hospital at Heaton Royds, at a cost of £5,600.—Plans passed: designing offices, Saltaire Mills, for Messrs. Salts, Ltd.; pavilion, Thackley Road, for Windmill Cricket Club; 26 houses, Gaisby Lane, for Mr. Dalby; house, Glenview Road, for Mr. E. Wright.—It is proposed to purchase a house in Farr Road, for conversion into a Child Welfare Centre.—The Surveyor is to prepare plans for houses on the Albert Road estate, the layout allowing for 196 houses.

TYNEMOUTH.—A loan of £3,000 is to be sought for the purchase of South Preston Villa for various municipal purposes.—Plans passed: shops and houses, Burdon Road, for Mr. J. Wallace; houses, Hunt Hill and Hawke's Estate, for Messrs. B. Peel, Ltd.; 8 houses, The Crescent, for Mr. A. Tasker; 8 houses and shops, Osborne Gardens, for Mr. H. D. Burton; 18 houses, Hall estate, for Mr. G. A. Lock.—A further instalment of the Quay extension is to be carried out at a cost of about £12,000.—The Housing Committee have authorised the preparation of plans for 24 blocks, each comprising four maisonettes of a superior character to be erected at Balkwell.

UXBRIDGE.—Plans approved by U.D.C.: 6 houses, Mead Road, for Mr. L. Meluish.

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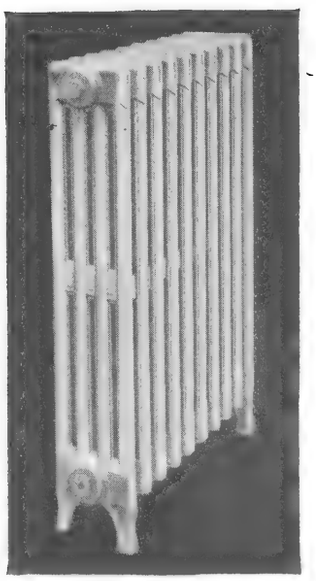

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MANCHESTER.—Alterations to Pomona Hotel, Gorton, for Manchester Brewery Co., architects, Messrs. Brameld & Smith; alterations to premises, 264 Viaduct Street, Ardwick, for Mrs. A. Reed, architects, Messrs. J. Pamphilion & Sons; alterations and additions to warehouse, Portland Street, for S. & J. Watts, architects, Messrs. T. Worthington & Sons; alterations to premises, 126 Cross Street, Gorton, for H. Playfair, Ltd., architect, Mr. J. Ashmore; alterations to "Mowers' Arms," Moston Lane, for Cornbrook Brewery Co., Ltd., staff architect; new shop fronts, Piccadilly and Tib Lane, for Style & Mantle, Ltd., architects, Messrs. E. Polland & Co., Ltd.; conversion of house into house and shop for Mrs. W. Rosmaine, architect, Mr. A. McDonald; alterations and additions to "Ram Hotel," 361 Oldham Road, for George Stephenson, architect, Mr. P. Flitcroft; D.I.C. House, Cross Street, for Dalton Investment Co., architects, Messrs. J. G. Prestwich & Sons; new offices, Water Street, for Lloyd's Packing Warehouses, Ltd., architect, Mr. H. S. Fernhurst, builders, G. Macfarelane & Sons, Ltd.; additions to United Methodist Church, Rowland Street and Devon Street, architects, Messrs. Dixon Hill & Co.; new works, Clayton Lane, for Clayton Aniline Dye Co., Ltd., plans by staff architect; store and warehouse, Faulknew Street, Miles Platting, for F. Tranter, architect, Mr. J. Acton; detached dwelling house, Charlestown Road, Blackley, for Mr. R. Broughton, architect, H. H. Sisley; alterations and additions to Deansgate Hotel, for Manchester Temperance Hotel Co., Ltd., architect, Mr. S. W. B. Jack; conversion to bank premises, 130 Oldham Road, and Hulme Hall Lane, for Union Bank of Manchester, Ltd., plans by staff surveyor; conversion of house into shop and house premises, 75 Halliwell Lane, Cheetham, for R. C. Frith, architects, Messrs. F. Newton & Sons.

POPLAR.—The Borough Council propose the purchase of a site at Cubitt Town for £4,750 for the erection of 71 houses at £500 each.—Plans passed: men's club, Bryant & May's factory, Old Ford Road, for Messrs. Yates & Co.; rebuilding Messrs. Buchanan's factory, Thames Place, for Messrs. Lordon & Son, Ltd.; additions to Globe Rope Works, East Ferry Road, for Messrs. Thorne.

CROYDON.—Plans passed: 5 shops and houses, Thornton Road, for Mr. P. Richardson; 4 shops and flats, Beckford Road, for Messrs. Rees & Archer-Betham; 10 houses, Green Lane, for Mr. F. Milton; 5 houses, Howard Road, for Mr. P. Richardson; 10 houses, Stanford Road, for Mr. F. W. Cattermole; 11 houses, Compton Road, for Messrs. Paish, Tyler & Crump; 7 houses and shops, London Road, for Mr. J. E. Trimble; 8 houses, Gonville Road, for Mr. White.—The Waddon Residents' Association are purchasing a site at Stafford Road for the erection of a hall.—An elementary school is to be built at Long Lane at a cost of £17,000.—The Winterbourne elementary school is to be converted into a central school, and a new elementary school erected adjoining at a cost of £12,000.—An infants' school is to be built at North Park at a cost of £6,000.

STOKE-ON-TRENT.—The Town Council have prepared a two years housing programme which includes the erection of 500 houses by the Council and 1,000 by private enterprise.—It has been decided to lend Mrs. E. G. Brown £2,700 in respect of the erection of 8 houses on the Harpfield Farm estate.—A committee which have investigated the abattoir problem now recommend a comprehensive scheme on a site near the railway.—Plans passed: 10 houses, Bagnall Street, for N. S. Building Co.; 8 houses, Longfield Road, for Mr. G. Jones.

WILLESDEN.—Baths are to be erected at Disraeli Road, at a cost of £1,800.—The Surveyor is to prepare a scheme for developing the Brentfield housing estate to its fullest extent.—Plans passed: office and flats, North Circular Road, for Messrs. W. Moss & Sons, Ltd.; 33 garages, Grange Road, for Mr. Arnott; additions to factory, Waxlow Road, for Luxfer Prism Syndicate, Ltd.; 7 houses, Herbert Gardens, for Messrs. Jermey & Son; 26 houses, Chatsworth Road, for Messrs. Godson & Sons; 6 houses, Fleetwood Road, for Mr. J. Webb; alterations, Earl Derby, High Road, for Caterers, Ltd.—Electricity developments are proposed at a cost of £27,500.

Trade Notes.

The Starkey Typewriting Office, of 6 and 7 Coleman Street, E.C.2, undertake all classes of typewriting and duplicating. The work, whether specifications, bills of quantities, or copies of accounts, is turned out expeditiously, and in an attractive form at extremely moderate charges, and their extensive business has been built up by employing "specialist" typists whose aim is the best and quickest work, neat and attractively finished at a moderate charge; no job is too small or too large, and the same care for detail is shown in each case.

A Gas-heated steam radiator that should meet with a ready sale among those who wish to heat large buildings with the maximum of efficiency and the minimum of expense is being supplied by Messrs. John Wright & Co., Essex Works, Aston, Birmingham. This radiator, known as the St. Andrew, is fitted with a patent steam-actuated valve which regulates the temperature by increasing or decreasing the gas supply. Thus a room heated by a St. Andrew radiator is kept at an even heat without any one in attendance; at the same time no fuel is wasted through raising the temperature of the room unnecessarily high. Moreover, each radiator is self-contained and requires only a gas-supply connection. A booklet has been compiled entitled "Warming Large Buildings," which gives a detailed description and prices of the several sizes of radiators, and a copy may be obtained post free on application.

Boyle's latest patent "Air-Pump" ventilators have been applied to Andover Congregational Church, Andover, also to the Caister Mixed P. School at Caister-on-Sea. Supplied by Messrs. Robert Boyle & Son, ventilating engineers, Holborn Viaduct, London.

A New Use for Colour-sprayed Lamps.

The general application of colour-sprayed lamps has been so successful that it is not surprising for one to learn occasionally of special services for which these lamps are employed.

An occasion of interest has recently occurred in Kent in connection with the trunk road which passes through Maidstone. A certain amount of road widening has been done in Maidstone, but where this widening ceases it was considered desirable to erect a warning light.

The requirements of Mr. E. E. Hoadley, M.I.E.E., engineer and manager, Borough of Maidstone Electricity Supply, were: "A red light which would give practically the same result as an ordinary red obstruction danger lamp."

Our illustration shows the marking of the end of the widening of the main arterial road, pending its completion through Maidstone; where an ordinary street lamp standard and fitting equipped with a 60-watt red colour-sprayed Osram lamp is used for the purpose described.

Mr. E. E. Hoadley affirms that this outfit has provided him with an excellent danger warning.

Messrs. Siemens, the world-wide electrical apparatus manufacturers, have invented an amusing game to be played with dice and a specially made board. The object is to reach 100 points first, and the stages of the progression include numbers the avoidance or reaching of which give disadvantages or advantages, each stage being marked by an appropriate reference to the various stages in the history of illumination.

There can be no doubt that for all practical purposes and many aesthetic ones a well-designed sash window is the best and most useful form of window. Sashes have of late years been increasingly popular, but their whole efficiency and convenience depend on the sash lines with which they are hung. Messrs. James Austen & Sons, St. George's Mills, Hoxton Square, London, N.1, who have made sash lines for the past 150 years, have sent us a sample case of the excellent series of sash lines and picture cords made by their firm, all of which architects will find to be strong and excellently made. Among the forty samples which show lines of every size and colour, architects will have no difficulty in making the choice of cords which can be thoroughly relied on and will meet every want.

BRITANNIC HOUSE, E.C.2 (Moorgate Front).
Architect:
Sir E. L. Lutyens, R.A.

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Building Progress.

Opposite the Public Library, in the High Road, Acton, Messrs. W. Baker & Co., Ltd., are erecting shops and show rooms, the steelwork being supplied by T. C. Jones & Co., Ltd. (Wood Lane.

The huge offices of the Ministry of Pensions at Acton form a most decided blot upon the landscape, and we must hope for a speedy development in the immediate neighbourhood, so as to conceal them, or at least, render them somewhat less prominent. *En attendant*, and just opposite them, the Olfields Estate, Acton Vale, is being developed, Messrs. Ferris Brothers now being employed in putting up a large factory, the steelwork for it being supplied by Drew-Bear, Perks & Co., Ltd. B. Goodman, Ltd., are the housebreakers, and the Phorpres Fletton bricks of the London Brick Co. and Forders Ltd. are being used.

The Goldsmiths' Estate at Acton is being further developed by the erection of small houses, of a different character to those we lately referred to at Ealing. H. Irons and Son are the builders, and the London Brick Co. and Forders Ltd. are supplying their Phorpres stocks, whilst Ibstock red bricks are being used.

At Acton also is being erected St. Saviour's Church and Institute for the deaf and dumb. Holloway Brothers (London), Ltd., are the general contractors. Mottled brick façades with stone-mullioned two-light windows and apparently a spare use of stone elsewhere are purposed.

At the Shepherd's Bush Station (C.L.R.) the superstructure is about to be erected, for which Messrs. John Cochrane & Sons, Ltd., are the contractors.

Sir Robert Smirke's well-known building in Trafalgar Square—we refer to the Union Club—is undergoing extensive alterations just now, for its adaptation as the Canadian Government Buildings. The frontage to Cockspur Street has been demolished, and the return frontage to the Square is receiving considerable attention also. Trollope & Colls are the general contractors, and sub-contracting firms include: The Aston Construction Co., Ltd., for steelwork; The Bath and Portland Stone Firms, Ltd., for stonework; Clark & Fenn, for fibrous and solid plastering; Diespeker & Co., Ltd., for their patent Big Span floors, and for mosaic; Waygood-Otis lifts; Comyn, Ching & Co., Ltd., for central heating; Fenning & Co., Ltd., for marble work; Bellman, Ivey & Carter, for scagliola work; H. H. Martyn & Co., Ltd., for stone carving; Bromsgrove Guild, Ltd., for decorative metal work; John Bolding & Sons, Ltd., for sanitary goods.

No. 10 Carlton House Terrace is undergoing considerable alterations at the hands of Messrs. T. Rider & Son.

In furtherance of our remarks in our issue for August 29 last, concerning new buildings at the junction of Red Lion Square and Dane Street, we find that Messrs. Diespeker & Co., Ltd., are supplying the fireproof floors. The building consists of basement, ground and three other storeys.

A block of seven lofty lock-up shops is about to be erected in Essex Road, Islington, at its junction with Cross Street. Each shop will have a frontage of 17 feet, with a depth of 45 feet.

Mr. H. Wilson, builder (Lea Bridge), is erecting premises in Lea Bridge Road, near the railway station. And further east, in the same thoroughfare, a block of seven or eight two-storey shop premises is rising.

The directors of Barclays Bank are energetic in opening new branches; in one case, existing premises at the junction of Theobalds Road and Great James Street are being adapted, the builders employed being Cole, Loasby & Co., Ltd. In High Street, Islington, new premises are being erected for the Bank, the builders being Stevens & Sons, the heating arrangements being in the hands of Colley, Meikle & Co., Ltd.; these are two-storey premises, the ground storey to be stuccoed apparently, and the first floor to be in red brickwork.

H.M. Postmaster-General is erecting new Post Office buildings at the junction of Rosebery Avenue and Farringdon Road, wherein the Hennébique system is being introduced; Galbraith Brothers are the general contractors, and the London Asphalte Co., Ltd., are furnishing the asphalte; we shall watch the development of this block with interest.

The extension to Messrs. Palmer's Stores at Hammersmith Broadway is having the steelwork supplied by Smith, Walker, Ltd.; the Excel Asphalte Co., Ltd., for asphalte; and Fenn & Co. as electrical contractors.

That very interesting memorial fountain, erected in Westminster in honour of those who worked so successfully for the manumission of the slaves, is just now in the hands of the renovator. It has for a long period been neglected, but even so has been a much more attractive object in the landscape than the Westminster School Crimea memorial not far distant. The firm of E. D. Hook, Ltd., has the work in hand. When the stone, the coloured enamels, and the coloured mosaics have been adequately restored the effect will be very pleasing.

A good deal of rebuilding is at present either in progress or in contemplation in and around Tufton Street, lying so close to Westminster Abbey. "Mary Sumner House," the new home of the Mothers' Union, and a nest of offices besides, is making good progress. Opportunity is taken to widen Wood Street at this point. Perry & Co., Ltd., are the general contractors; the masonry is being furnished by Ordell Masonry Company; Messrs. Gilbert, Seale & Son are carrying out the stone carving; and F. A. Norris & Co. are supplying the metal windows. The building will consist of basement, ground and two or more upper storeys. Stone is being used for the lower portion, and mottled brickwork with red gauged brick for window dressings for the superstructure.

Further along, at the junction of Tufton and Dean Trench Streets, is a large block of labour-saving houses, four storeys in height, in rustic brickwork without window dressings; the doorways are in stone. Messrs. Griggs & Son are the builders.

In Gayfere Street, at its junction with Smith Square, Westminster, Messrs. Holliday & Greenwood, Ltd., have put up a building, similar in general appearance to the one just referred to. Messrs. Jackson & Boyne are responsible for the electric lighting.

Approaching northern London, we note that in Gray's Inn Road, on the site of Nos. 158–162, the firm of William F. Blay, Ltd., is about to erect a block of three shops with first floor over. The Westminster Bank is extending its premises in Pentonville Road, taking in addition Nos. 266–268, with Dove Brothers, Ltd., as the builders. And further along Pentonville Road, by the reservoir, an extensive and effective block is rising for the Claremont Garage and Petrol Service Station; it presents a crescented centre between flat wings, and shows a red brick façade over a blue brick plinth. Measures Brothers (1911), Ltd., are supplying the steel.

A large factory is in process of erection in Northdown Road, Islington, wherein Siegwart fireproof floors are being used.

Messrs. Falk, Stadelmann & Co., Ltd., are adding an important extension to their premises at the junction of Farringdon and Clerkenwell Roads. The two façades are in stone supplied by S. Bysouth & Sons, and the steelwork is that of Aston Construction Co., Ltd. Messrs. Allen, Fairhead & Sons, Ltd., are the general contractors. The decorative treatment is very simple in Greek fret and horizontal channelling.

WANDSWORTH.—Plans have been prepared for flats to be erected on land at Blackshaw Road.—Plans passed: Extension of Mission Hall, Wardley Street, for Messrs. Swan Bros.; 7 houses, Grove Road, for Messrs. R. Bilham & Son; a house, Streatham Common, for Messrs. J. Potterton & Sons; addition to "Horse & Groom," Mitcham Road, for Messrs. J. Dorey & Co., Ltd.; pavilion, Lyford Road, for Messrs. W. H. Gaze & Sons, Ltd.; 4 shops, Streatham Vale, for Messrs. Chapple & Fulford; 4 houses, Upper Tulse Hill, for Mr. W. H. Davies.

WEST BRIDGFORD.—The surveyor is preparing details for the proposed town planning scheme.—Plans passed by U.D.C.: 8 houses, Violet Road, for Mr. Pepper; 4 houses, Loughborough Road, for Mr. Simons.

WOOLWICH.—One hundred houses are to be erected by the Borough Council on the Page estate at a cost of £52,000.

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Tranquillity and the R.I.B.A.

The President of the R.I.B.A. in his inaugural address dealt with very natural satisfaction on the events of the past year. The policy with which he has identified himself has met with complete success; he not only has, like the Conservative party, an absolute majority, but, unlike them, has no opposition to deal with, since in virtue of the pledge given the opponents of the new order have withdrawn all opposition. To many it will seem that the Mecca of most architects—Registration—is in sight and almost within grasp, an optimistic view which will be proved or disproved in time.

Of the changes in the Charter and By-Laws which—with the sanction of the Privy Council—will now be effected, we think that some points are good, while others are doubtful. Among the former are the provision that one-third of the Council only shall come up for election each year, following the precedent of the municipal bodies, which seems to us a wholly desirable change. Continuity of policy has undoubted advantages, and it is hard that those who have worked strenuously for some end should find themselves out of office before their labours are completed. But we do not quite see that the fact that one-third only of the Council retires will eliminate electioneering; for if some controversial subject divides opinion the election of one-third of the Council will be as "political" as that of the whole.

We believe that the increase of the size of the Council is regrettable, and should have said that it was already too large for working purposes; indeed, as is common with similar institutions, the Council usually was composed of a small inner circle who did the work, and a larger outside number who acquiesced in the decisions arrived at.

But we suppose that the tendency to believe in the special power of individual representatives of different interests to protect and advance these interests is almost universal, and that the enlarged Council will be considered as a gain.

It was said of the framers of the American constitution that they were chiefly inspired by a fear of democracy and a wish to limit its powers. So here, while the principle of the poll—why should it be called a postal vote?—is conceded, it is so hedged round with conditions that it would appear to be easy to withhold it if the Council of the time being so desires. In our view, the poll should be taken, if a certain number of members so desire, whether the governing body think it to be necessary or otherwise. It should, in our view, be a final and absolute check, for after all it would be difficult to get, say, 100 signatures asking for a poll, were there not a strong belief that it would lead to a definite expression of desire on the part of the members of the Institute.

At the same time we admit that it seems unlikely at present that any very controversial matter will arise. The most controversial issue, that of Unification, is disposed of, and as for Registration, the feeling in favour of it is so strong that no reasonable man would dream of opposing it, though there may be many who feel that its advantages are likely to prove illusory, and, many again who regard it as being impossible of accomplishment. Words have a wonderful power, but why anyone should hail with delight the prospect and boon of being able to call themselves "chartered architects," we do not understand.

Mr. Gotch alluded to the newly formed Royal Commission of Fine Arts, which was also dealt with subsequently by Lord Crawford and Balcarres. Though this body is only advisory, it will doubtless carry out much useful work, and in the course of time its functions will undoubtedly be enlarged and its authority strengthened. The safeguarding of the Library was another subject alluded to by the President, and it is to be hoped that any new scheme will include the provision of greatly enlarged premises for the Library, which will increase its sphere of usefulness. It is at present indifferently lighted and inconveniently arranged, and an entirely new building to hold it seems to be quite as necessary as the new meeting room. We hope that a considerable portion of the new funds which may shortly be available will be spent on the Library, both on its accommodation and in the purchase of a greater number of books, especially for purposes of the loan collection, which is not worthy of the Institute.

Last, but by no means least, a good printed catalogue is badly needed, copies of which might be obtained by members.

At a comparatively small expense it would be possible to find out whether architects would not avail themselves of a luncheon room; and if this proves to be the case further steps might be taken in the way of the provision of suitable accommodation, while if experience showed it not to be required little would have been lost. The promotion of greater friendly social intercourse would, in all probability, effect more than many meetings, or even than exhibitions of drawings, to which the public are invited.

We do not know what plans the Council may have in connection with the R.I.B.A. premises, but we think that many members would welcome the innovation were the R.I.B.A. to emulate the Association to a certain extent in an effort to make the Institute a place of social meeting for members. Of course it has not the backbone provided by the Association School, but still something might be done which would incidentally serve a useful purpose in promoting good fellowship among architects. The strongest and most enduring bonds which can exist between men are those of friendship and personal intimacy, and it will always increase an architect's personal reputation if the public find he is well spoken of by his colleagues. And greater knowledge and fuller opportunities of intercourse are for this reason most desirable and likely in the end to effect more than the most perfect code of rules and regulations.

Our Illustrations.

THE PLAZA THEATRE, PICCADILLY CIRCUS, LONDON, W. FRANK T. VERITY, Architect.

CHAIR OF STATE OF CARVED WALNUT. Drawn by WILLIAM T. BENSLYN.

COTTAGE AT PORLOCK, SOMERSET. MICHAEL WATERHOUSE, Architect.

Notes and Comments.

Indian Palaces.

The recent case for wrongful dismissal brought by Mr. H. K. Smith against Messrs. Martyn, of Cheltenham, recalls to our mind the great difficulties which have to be met by those who wish to do business with Eastern potentates. Principles of clean administration are not thoroughly understood or acted up to in the East, nor can the average native ruler be credited with unflinching purpose and resolve. He frequently determines on a grandiose scheme in a moment of enthusiasm, gets tired of it as a child does of a toy, or finds his treasury empty and abandons his purpose. We all remember Rudyard Kipling's picture of a native ruler who, in order to earn a high Indian decoration, pushed forward with a great improvement scheme, and how when a lesser decoration was given to him he relapsed at a tangent into his old method. These incidents should be expected by those who attempt the almost impossible task of adjusting two very different civilisations to one another, but we should not congratulate an architect or manufacturer on obtaining an Eastern commission or contract until it had been carried out!

Politics and Trade.

We have the clear prospect of an era of political peace lasting at least for four or five years and if, as we confidently expect, the advantages of such a régime are proved, for many more. Under these circumstances a very marked revival of commercial undertakings should be in sight, and in no sphere is this likely to be more clearly marked than in the world of building. For so long as there is a fear of confiscation and penalising legislation people are afraid to build, but now that fear has been eliminated by the results of the elections. It is possible that the trials of the last year may have been a blessing in disguise, for it will possibly have made the future advent of a Socialist Government very difficult, if not impossible. We suppose that it is likely in housing to see Mr. Neville Chamberlain's policy carried out, and we have certainly seen the end of Mr. Wheatley's entravagant scheme. We hope that before the new Government's tenure of office closes that State housing will be ended.

Tales of Old Inns.

Trust Houses, Ltd., Shorts Gardens, London, have issued an entremely attractive series of leaflets on old inns, which presumably they have acquired. Those sent to us include such houses as the "White Horse," Dorking, the "George," at Crawley, the "Dorset Arms" at Withyham, the "Dorset Arms" at Hartfield, the "Crown" at Amersham, the "King's Arms" at Berkhampstead, "Rose and Crown" Tring, the "Bridgwater Arms" at Ashridge, and the "Red Lion" at High Wycombe. They are illustrated by attractive sketches and photographic views, and each contains a little outline map of the locality. Trust Houses, Ltd., have done a very useful work in helping to preserve old and attractive inns by acquiring them and adding to their convenience, and their houses are well known for their comfort and pleasing character. They have, as a matter of fact, formed a society for the preservation of many old buildings and at the same time carried it out as a commercial undertaking.

The Fanmakers' Company.

The ancient mistery of Fanmakers of the City of London advertise a competition with the object of promoting the study of modern methods of ventilation, and this competition will be held every year, the Company awarding its silver medal to the successful competitor. The subject set is the Ventilation of a Police Court, and competitors are not to exceed 25 years of age, the essays to be sent in on or before the 1st of May next. The three assessors appointed are Messrs. John W. Cooling, Alan E. Munby and H. D. Searles-Wood, and the essays are to be accompanied by drawings. We presume the Company has been attracted by the use of the "fan" in ventilation, though the original fan was always regarded as an essentially decorative feature connected with dress. But no one will criticise the Company's evident desire to promote a useful end, and it is more than likely that by taking some byeway or other, some of the City Companies connected with almost absolutely extinct crafts might discover new spheres of usefulness.

A Sunday Outing.

We often wonder how many architects take the trouble to wander round the central portions of the City of London. The best time to obtain a real impression of the lack of architecture in our city is on Sunday. During the week the shops and what they display and the busy traffic of the streets are apt to distract our attention from most of the very ugly elevations. And as we pass eastwards the effect becomes at times quite painful. And yet are those professionals, who are erecting shopping centres in the outer suburban ring, considering the future. To-day the needs may be, comparatively speaking, small, but so were those of the Hackney Road many years ago; to-day the lack of a larger vision in former times is responsible for the terrible buildings that stand in central parts of our busy city.

Taste.

Mr. Bohun Lynch writing in "Architecture" gives a very happy definition of what should be meant by "Taste," and what we should try to obtain. This is "to find the permanent mean which is independent of fashion." Taste would largely mean in this sense the faculty of discriminating between the permanent and the ephemeral, the clearness of vision which will enable us to withstand the passing caprices of any age or vogue. It is interesting to speculate on what architecture might have been were it not subject to the drag anchor of necessities, and our belief is that it might easily have taken forms as sharply contrasted and temporary as the changes of fashion in dress, but practical necessities have usually given it in most ages some semblance of the reasonable and inevitable. But it is clearly a fallacy to imagine, as some have done, that it can be analysed and defined in mathematical terms. It will always occupy an intermediate position between two groups of conceptions, less exact than the one and necessarily more defined than the other, and the exercise of a sense of taste by architects is very necessary.

University of London School of Architecture.

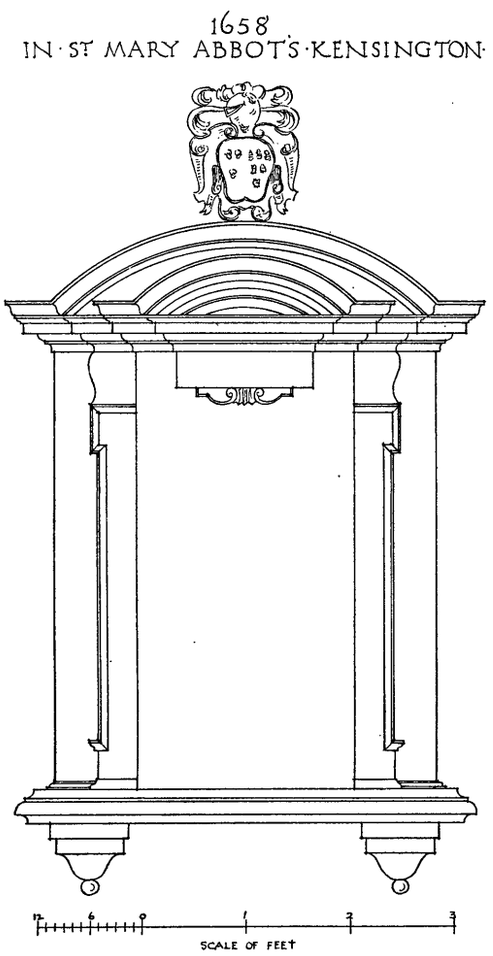
The Jarvis Scholarship given by the Royal Institute of British Architects has been awarded to Mr. M. A. Sission, a student in his fourth year, in the University of London School of Architecture.

The Victory Scholarship of £100, given by the Society of Architects in connection with a competition for design for a public school, has been awarded to Mr. C. H. Short, a student on his fifth year, of the University of London School of Architecture and formerly Ronald Jones Scholar.

WIGAN.—Messrs. Williams Deacons Bank, Ltd., Moseley Street, Manchester, has acquired property 34, 36 and 38 Wallgate, together with a plot of land adjoining for extensions to their premises.

Some Mural Tablets of the 17th and 18th Centuries in London Churches.

Measured and Drawn by E. Leslie Gunston, A.R.I.B.A.



No. 1.

Since the earliest days of civilisation man has been inspired with the desire of recording the death of his contemporaries by monuments and inscriptions for the benefit of succeeding generations, so that the memory of the dead might not for ever perish in the twilight that so often overshadows the ages of the past.

And for this very reason these monuments have been made as lasting as was possible. The stupendous monuments of the Pharaohs still loom out of the sandy desert of Egypt and magnificent mausoleums remain to remind us of the splendour of Imperial Rome.

Going back to a civilisation after that of Egypt and before the Roman, we contemplate with reverence and admiration the exquisite refinement of Greek art as displayed on their steles, and drawing nearer the present time splendid evidences of painstaking and loving care are to be seen in our Gothic cathedrals, for there marvels of sculptured stone remain in honour of the worthy dead, the memory of their names and deeds for ever secured by these magnificent chantreys or by their tombs.

In the splendours of the Tudor tombs the chief interest would be centred in the recumbent effigy of the person honoured, laid upon the tomb proper and surmounted by a sculptured canopy, or in place of the effigy one or more kneeling figures, while a small tablet bearing the inscription would be quite a secondary feature placed in any part that might appear convenient in the general design.

With the full flood of the Renaissance, elaborate tombs and monuments were still erected, but the inscription tablet of the Tudor examples became more important and was finally transformed into the mural tablet proper, the design of which reached its most beautiful form in the seventeenth and eighteenth centuries.

During these two centuries the design of mural tablets fell naturally into certain groups. Some in one group differ only slightly from others in another group, but still in certain respects are of a different character.

The chief difference in these groups lies in the arrangement of the panel for the inscription, some tablets having this panel surrounded by a moulded frame, others have it placed well forward and flanked by receding panels to the wall face, and others are of a more elaborate nature, having the inscription panel surrounded by a moulded frame and flanked by pilasters or miniature classical columns.

The inscription is of great importance in the design of these mural tablets, as by its arrangement the dimensions of the slab are fixed.

Great skill is often observable in this arrangement, and it is to be noted in many of these tablets that a panel is left below the base shelf, no doubt for future inscriptions.

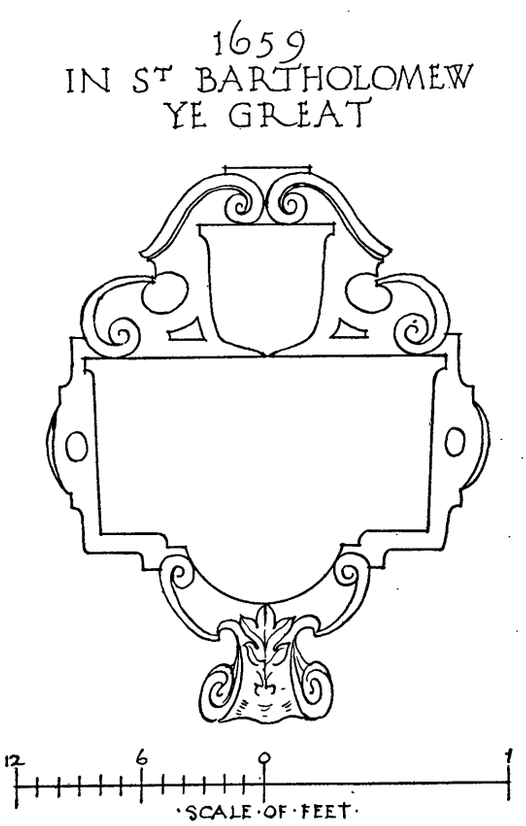
Unlike the floor slab, which is continually being trodden upon and worn and which therefore necessitates an incised inscription, not all the inscriptions on mural tablets are incised.

Most of the earlier tablets have gold lettering on a dark or black marble slab, but many of the later examples have incised and blackened lettering.

With regard to the mouldings of these tablets, as they belong to the Renaissance they naturally strictly adhere to Classic precedent, and consist of such mouldings as the cyma-recta, cyma-reversa, cavetto, scotia, ovolo, torus, fillet, etc.

These tablets can teach the observant much. A nice sense of proportion is in almost all cases the rule rather than the exception, and in the design as a whole and in the relation of one part to another. Many tablets are spoiled through over-ornamentation, but most have a grace of design that repays careful study. Much ingenuity is shown in some tablets in avoiding a commonplace solution of a problem by substituting a beautiful solution.

The antiquities of Greece and Rome formed an inexhaustible treasury for the discerning architect of this



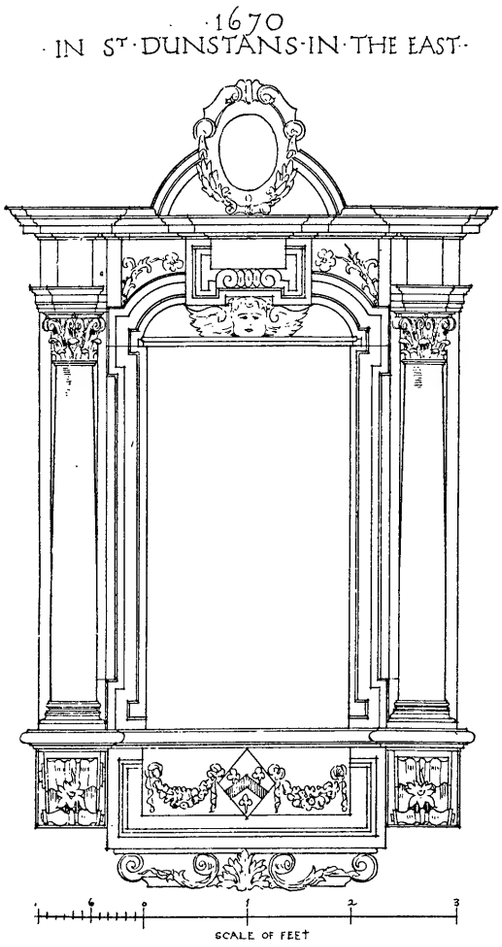
No. 2.

period, a brilliant period in many ways in Architecture, Letters, Art, Costume—and there can be no excuse now for lack of scholarship in the design and refinement of detail in mural tablets, after a study of the inspiration and resource and inventive genius as displayed by these old designers in their work, there being so many excellent examples existing in the churches of London alone as these drawings endeavour to show.

The tablet in St. Mary Abbots, Kensington (No. 1), is most effective, chiefly due to the use of black and white marbles and to its fine proportions. The inscription panel is of black marble with gold lettering painted on. With the exception of the moulded base-shelf, which is also of black marble, all the remainder of the tablet is of white marble. The armorial bearings are, as usual, coloured. Aaron Mico, a merchant, is the one commemorated.

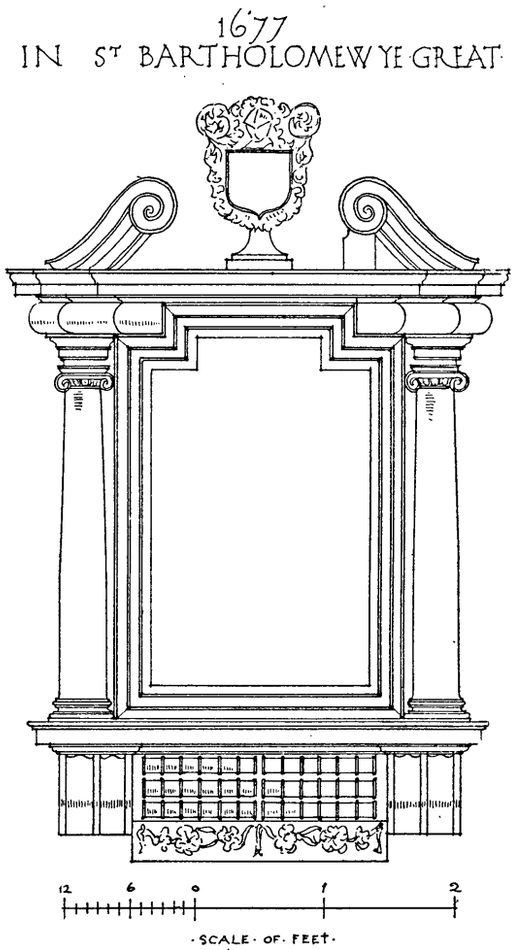
Though only a year later in date the little tablet in St. Bartholomew at Smithfield (No. 2) is of a very different character.

The general design shows very few traces of Classic influence, the whole being very reminiscent of Jacobean work in its curvilinear lines. This tablet is to the memory of Ellis Yonge," one of the Secondaryes in the Office of the King's Maiesties Remembrancer in the Court of Exchequer."



No. 3.

A very interesting tablet is No. 3, placed in St. Dunstan's in the East by the parishioners in memory of one Richard Hale (his original monument of 1620 having been destroyed in the Fire) as a mark of their gratitude to his granddaughter, Lady Williamson, who subscribed very generously towards the rebuilding of the church. The inscription is of gold lettering on a black marble tablet. The square friezes over the columns, the small central panel, the angel-head and wings and the two narrow strips between the columns, and the architraves of the main slab, the moulded base shelf and the base panel are all of black marble. The capitals of the columns and the portions of foliation are gilded. The remainder of the tablet is of a dark grey marble. The armorial bearings are coloured, also the



No. 4.

diamond-shaped panel with the coat-of-arms on the base slab and the incised ornamentation of the same panel. A very rich effect is obtained by this means, though the plain black and white of No. 1 tablet is more effective in its simplicity.

A curious treatment of a base panel is to be seen in the tablet to Thomas Roycroft (No. 4) in St. Bartholomew again. Here a series of six books appear to rest on horizontal shelves, their backs just raised from the surface. The usual pediment, as is often the case in these tablets, is broken for a crest with armorial bearings.

A tablet which, unfortunately, has been damaged slightly owing to removal from one church to another is No. 5, to the Rev. G. Martin. It bears the name of the sculptor Falton, and it was removed from St. Mildred's, Bread Street, in 1874.

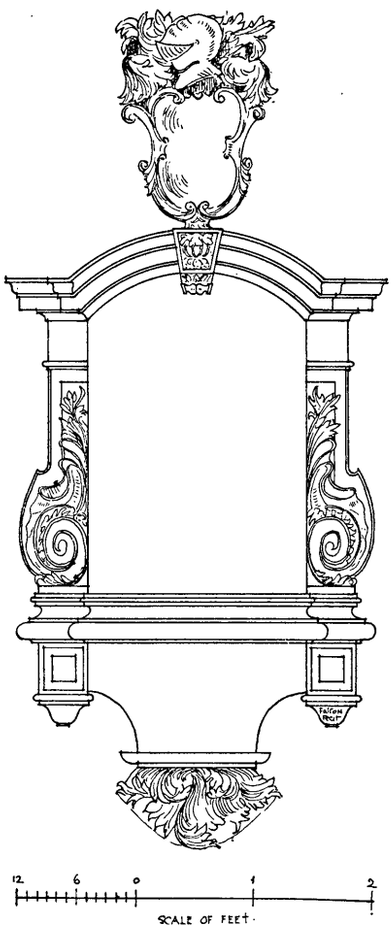
A feature is the carved keystone, forming a pleasant junction between the large crest, helm and mantling, with the cornice.

Another tablet from St. Bartholomew the Great is that to James Master (No. 6), very simple but dignified, the whole being done in white marble.

The inscriptions on this tablet are illuminating. The father of the said James Master had twelve sons and eight daughters. Their mother died aged 99 years 6 months. James Master himself had eight daughters and four sons, and one of the latter commanded several ships in the Royal Navy, and his prowess is set forth on the slab beneath the base shelf, how he did in 1718 " particularly distinguish himself in ye engagement against ye Spaniards on ye coast of Sicily by forcing the Spanish Admiral in Chief to surrender to him."

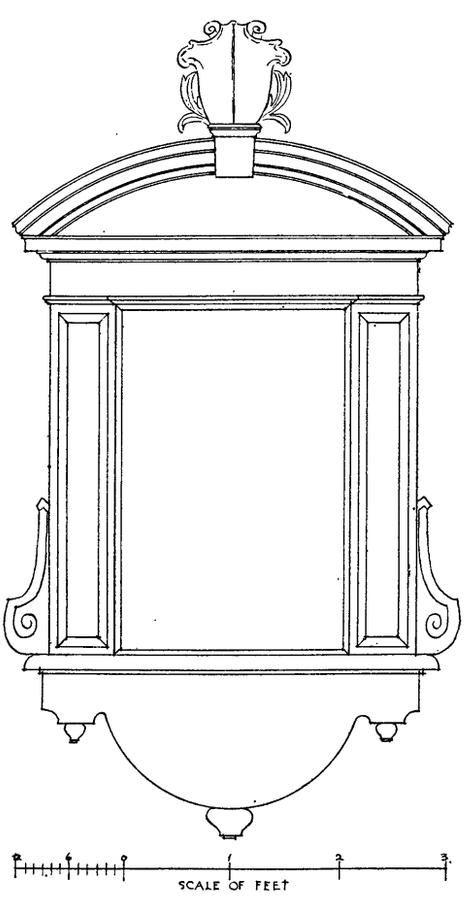
A tablet of white marble having black lettering painted on is that to Richard Backwell in St. Helen's, Bishopsgate (No. 7). The central inscription panel is slightly sunk and the three shields beneath the base shelf are slightly raised, but have nothing on them now. Some interesting facts as to cost of erection, etc., was obtained from the Extract from Vestries, 1730-1732, which are transcribed here:

1722
IN ST MARGARETS LOTHBURY



No. 5.

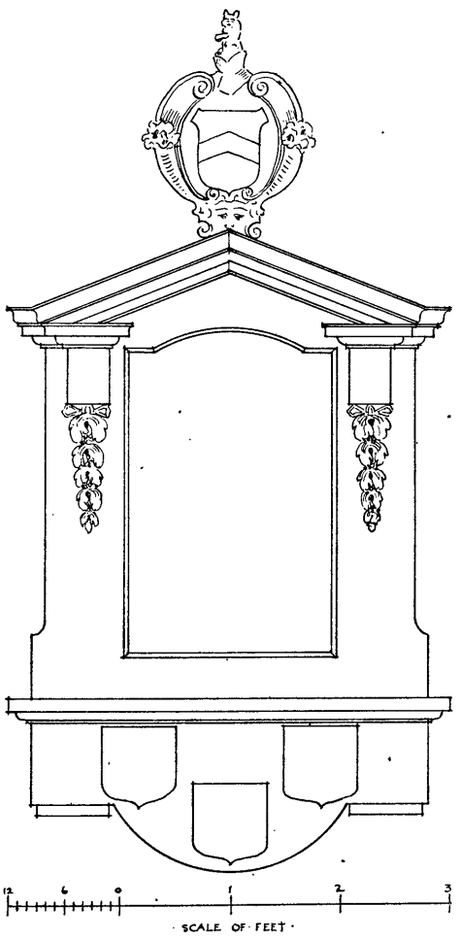
1724
IN ST BARTHOLOMEW YE GREAT



No. 6.

"July 14.—Application was made on behalf of Richard Backwell for leave to put up a monument between the Pulpit and the South window annexed, not exceeding four feet wide, six feet high, and the projection not to exceed nine inches. Agreed that he should have leave on payment

1731
IN ST HELENS BISHOPSGATE



No. 7.

of twenty guineas. His agent being informed thereof refused to comply and offered ten which this Vestry rejected.

"July 29.—Mr. Backwell's agent attended and paid the twenty guineas. He making good all damages that shall be done by reason and consideration thereof."

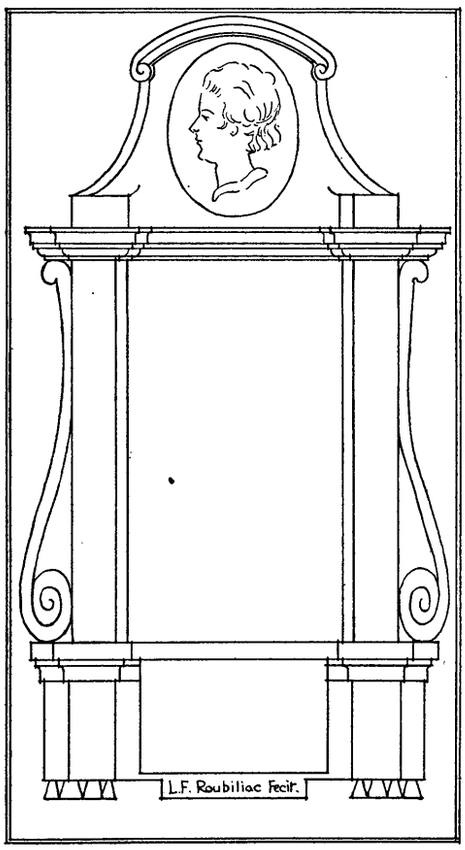
It is interesting to note that the actual dimensions of this tablet are 5 feet 10 inches high (exclusive of crest), 4 feet wide, and the greatest projection is 9½ inches. The position seems to have been altered as it is at present on the South wall, close to the West doorway.

An unusual tablet is No. 8, in St. Botolph's, Aldersgate, to a little girl aged just 15, Elizabeth Smith. The whole tablet, large as it is, is placed on a raised slab of marble and was designed by the famous French sculptor, Louis François Roubiliac. The inscription tablet is slightly concave horizontally, and in the position occupied by the pediment and crest is an oval medallion containing a beautiful life-sized head in bas-relief of the dead girl. Roubiliac (1695-1762) was trained in France, but worked in England, and is chiefly noted for his monuments in Westminster Abbey to Handel and Mrs. Nightingale.

The following verses are inscribed on this tablet :—

"Not far remote lies a lamented Fair
Whom Heaven had fashion'd with peculiar care,
For sense distinguish'd, and esteem'd for truth,
And ev'ry winning Ornament of Youth,
Yet liv'd she free from Envy, and admir'd,
But (ah too soon !) she from the World retir'd.

·1750·
·IN·ST·BOTOLPHS·ALDERSGATE·



No. 8.

Filial affection rose in Her so high,
No sage can censure the Parental sigh,
The gen'rous Plant had shone in beauty's Pride,
Gaily it bloomed; but in the blooming, dy'd.

Caelo matura, seculo desideratissima.

Learn from this Marble what thou valu'st most
And sett'st thy Heart upon, may soon be lost.

Colour and Architectural Elevations.

Frequent references are made from time to time in the Press, to the use of colour in architectural elevations. It would seem that architects had lost sight of the fact that ornamental forms are in a sense the colour spots in an elevation, and it is only because these panels, frieses and fillings have been too profusely used in the past that they lost their true value.

We do not of a necessity need actual colouring on our elevations so much as a proper sense of the correct application of decorative forms which includes the use of mouldings.

Ornamental forms of all kinds need to be understood. They need very careful handling. The clever designer realises that these decorative adjuncts will supply him with the colour spots in his elevations. You may lavish your decorative ideas on a portico, but the whole value of this effort will be lost if you do not realise that this portico is the diamond of your design, the point of concentration, to which all other forms of decoration must bow and play a very minor note. If we look at some of the buildings in the new Regent Street, what is our first and lasting impression. None other than that the designers of these buildings have not possessed a proper sense of the value of ornamental forms. Their elevations for the most part display an exhibition of fireworks of a cracker nature. The buildings lack simplicity and dignity. If colour had been used, and the same regulations had been in force as those which are responsible for the present architectural expression, the street would have required another name.

At a recent professional gathering, where the architecture of Regent Street was being strongly criticised, it was quite an interesting sight to watch the facial expressions of some of the architects who contributed to the recent rebuilding activities.

The lecturer was not fair in his remarks, and knowing the true conditions which governed the whole scheme, his remarks were rather in bad taste. Under similar conditions, the lecturer might not have acquitted himself any better. The conditions were in some cases, specially in those where exception can be taken, such as preclude all possibility of any more reasonable elevational treatment. The architects being perforce obliged to content themselves with internal planning and decoration schemes in which sphere they have shown an excellent knowledge and appreciation of the modern needs of their clients.

When we look at Britannic House, Moorgate Street, we also realise that the architect has used his ornamental forms as spots and bands of colour, and though we think the execution of some of these details are perhaps too elaborate for the positions they occupy, we fully recognise the richness of effect that even this elaboration of detail gives to buildings.

The ornamental panels and bands are shown to great advantage by the contrasting plain surfaces which illustrate repose. The introduction of colour would have lessened the dignity of the whole conception. Africa House, Kingsway, and Bush House in the Aldwych are two examples where ornamental forms have been sparingly but effectively used. Colour of any kind would have spoilt the general harmonious effect of these buildings. The chief objection to the use of coloured decorations on the external elevations is that we have no authority at the present time who would control these matters. And without control it is quite possible to imagine our streets being made utterly ugly.

"The Architect" Fifty Years Ago.

November 7, 1874.

The delightful misadventure of the Gold Medal came next under the presidential review. The time has now arrived when the half-amazed and half-resentful anger which the Council of the Institute displayed against Mr. Ruskin has become a joke. The terrible epistle by which the bright author and vehement Slade-Professor so characteristically declined the proffered honour was read, it seems, at the special meeting in the recess, as part of the process by which Mr. Street was selected in his stead. Some of the more jovial members would have had it recited again on this occasion but the President so plainly hinted at the fact of his having made capital of it in the manuscript which was in his hand, that they preferred to avoid the chance of spoiling the pleasantry. Mr. Ruskin can no doubt take a joke as well as most men; and as Sir Gilbert Scott can make a joke upon occasion as neatly as anyone need wish, we may take it that the eminent and amiable author will feel in no way offended when he comes to read the genial words in which the equally distinguished and good-natured architect boldly fulfils his duty as a loyal craftsman in humorously returning the polished shafts of the assailant upon himself. "This is no time," is the impassioned exclamation of the author of the "Seven Lamps"—"no time for us to play at adjudging medals to each other!" It is a time of the culpable spoliation of all that is rich and rare in architecture. To pretend to maintain Committees for the Conservation of Ancient Monuments is a sham. The writer has all his life been protesting against the fatal neglect which has now culminated in four specific acts of Vandalism—one at Naples, one at Florence, one at Pisa, and one in France. The members of the Institute are personally answerable for all these. He himself is so far answerable, as a perpetual utterer of unavailing protests, that he and they are in the same calamity as defeated and crestfallen partisans of architecture and the right, defeated and disgraced by the partisans of railway engineering and the wrong. There is this difference, however, between the sorrowing protester and the apathetic Committee of Conservation, that he sorrows while they smile. This is no time, therefore, for him and them to be playing at medals, even though they be Royal and of gold. The Institute he respects; and the Queen he serves; but, as for the medal, he will have none of it. Such was the pleasant light in which Sir Gilbert was pleased to represent the very odd incident before him. No one has taken more sincere and active interest than himself in discouraging and denouncing the destruction of artistic relics. No one has done more than he in carefully preserving in spirit and in truth such ancient remains as have been professionally committed to his care. No one grieves more over the advancing tide of reckless improvement which so quickly and irrecoverably obliterates the landmarks of old times. To hold him responsible, therefore, for that which he thus laments without having the power to help, and for such outrages even in distant lands, is a thing he cannot submit to. Far better would it be to fix the attention of one's common sense upon the "spoliation" which is so frequently involved in the so-called restorations of our own churches. More than half of our whole possession of these, as we understand Sir Gilbert Scott to say, have been dishonoured in this stupid way.

Building Trade Notes.

By H. Bryant Newbold.

Wanted—A Leader.

¶ Whatever may be the case with the employers there can be no doubt that the operatives are badly led. Some there may be who feel that the administration of the employers does not represent the wishes of the majority, and the truth as to this will be best realised by those who know them best. But that the officials of the operatives' unions do not represent the feelings of the rank and file must be clear to everyone. Even as it was made clear at the last arbitration that the leaders of the employers were not united, so there was abundant evidence that whatever settlement might be arrived at the leaders of the operatives could give no binding guarantee that the terms would be observed by their rank and file.

With the trade union leaders a rigid observance of the eight-hour day, in accordance with their Socialistic teachers, has become a fetish; but conversations with the working operatives up and down the country go to prove that to them the matter is not one of such importance. It would be no over-statement of the case to say that the majority of the working operatives would work any hours during the summer time in return for some guarantee against loss due to bad weather. It is unhesitatingly declared that were it possible for a ballot of the uninfluenced and honest opinion of the working operatives to be taken throughout the country it would be found that there was a very large majority in favour of unrestricted working hours in the summer time. This desire is a reasonable one. In an industry, in a sense half-way between agriculture, which proceeds regardless of the weather, and manufactures which are conducted under cover, building which has some of the characteristics of the manufactured article necessitating care and skill, but yet is carried on out of doors, the weather conditions are necessarily a restriction. And no man worthy of the name and who takes a proper pride in himself and his work likes any restriction upon his efforts.

By those who know the building trade in a personal way it will be readily agreed that the operative, whatever he may be, is above everything a reasonable person. It may be that this is due to something in the nature of his work. In the first place building is essentially creative; and secondly every new building presents opportunities for a certain amount of individuality and entails a degree of education above that required in other industries. Above all there is a humanising effect about building. The act of contributing towards the creation of a work for the shelter and protection of mankind has in it something which tends towards the development of the better side of man's nature. Consequently the building trade operative, especially the more skilled craftsman, is above all things a person to whom reasoned argument rather than vicious excitement of the emotions will appeal.

In days now past, when building labour, in common with all, was sweated, it may be that some fanatical extremisms were essential to rouse the apathetic amongst the rank and file to rise and throw off the yoke of suppression. But these days are over, and the need for fanaticism is past. Do the trade union leaders realise this, or are they still endeavouring to teach men to pull down and to overthrow? If so, like the recent Government, they, though excellent in opposition, are useless in power, having nothing to erect in place of that which they have overthrown. Are the leaders still planning to destroy that which has long since been removed? If so they are wasting effort, and are unfitted to lead on towards further progress. If so they are no longer leaders, but merely restrictive bars to progress standing in the way of the proper development of the initiative of the more reasonably minded members of the rank and file.

In these circumstances what is required by the rank and file is a leader, who will not restrict the individual, but will lead on towards development and betterment. There must be no restriction of output, for progress does not lie in that direction; there must be no interference with the right to work any hours that it may please a man to work, for freedom from slavery is not reached by the substitution of one set of restrictive laws for another. The only hope of progress towards betterment in the life of the operative lies in freedom from restrictions and development of the man's own individuality. Towards this end must a real leader lead. And never was there a greater need, nor a more propitious opportunity for a real leader than at the present time.

The Building Owner.

If it be accepted, therefore, that either a new spirit must in future actuate the leaders of the operatives, or that the present leaders, having served their purpose, must make way for new, it follows as a logical conclusion that some new form of organisation of the respective interests of the industry must be set up to take the place of that existing at the present time.

The organisation of the industry as now existing consists of a federation of the employers' associations and a federation of operatives' unions; and the purposes of these two bodies are opposed. Each sees progress to lie in the opposite direction. In such circumstances what can result but a continual state of "tug-of-war," in which, circumstances lending weight from time to time, first to one side and then to the other, one gaining now, the other then—what state can result finally but one of stagnation? Strengthening of the organisation of the one party, resulting in a temporary gain to that party, will only lead to a consequent strengthening of the organisation of the other party.

And this gives rise to the enquiry as to whether the organisation of the industry is a proper one, and representative of the interests involved. To which enquiry it will readily appear that it is not. For whilst at the present time only two interests are organised there are three, if not four, parties to the industry. The employers provide the materials and direct operations, and the operatives supply the labour; but what use are either or both without the capital and the requirements of a third party? Without the needs of someone, for a building and the money to pay for that building there will be no building; and the provisions of the employers and the operatives will not be required. What need then of the organisation of either of two parties for whom there is no longer any need nor functions to perform? With the building owner entirely withdrawn there will be no building, and consequently no need for either employer or operative.

The point that it is desired to establish is merely one of commonsense and one which must appeal to every fair-minded person to whatever section he may belong. It is that where the organisation of an industry is concerned and the regulation of the affairs of that industry, the interests of every party to that industry must be represented and considered. Where this is not so the conditions are one-sided and unfair. In the building industry this is the case, for interests of the building owner are not recognised in the regulation of the affairs of the industry. The building owner has no organisation and consequently no voice in the settlement of affairs; and this, seeing that without him the industry must cease, seems more than strange. Such a one-sided state of affairs can only be the result of a very culpable neglect upon the part of somebody; and if this be not the building owner then it must be his agent, the architect, who is to blame. Recriminations are useless affairs. But a faulty position once recognised is best faced. And now that a return to stability and business sanity seems likely, if only temporary, is not this the opportunity for a proper reorganisation of the industry upon commonsense and fair-minded lines? Should not this opportunity be seized by the building owner for the recognition of his interests? Must not the building owner now set up his own organisation and demand its recognition? May it not well be that in this direction lies a proper peaceful progress of the industry in place of the present rather ridiculous and certainly futile "tug-of-war" between employer and operative?

A.A. Members' Holiday Sketches.

This is a delightful exhibition, one in which a critic can find real pleasure. The artists show a pleasing absence of self-consciousness in their work, proving that they have not been hampered by the thought of jeopardising an established reputation. The influence of an architectural training is entirely lacking, and those pictures which illustrate architectural subjects have been rendered in a manner that will convince the public that the artists are acquainted with the respect due to architecture when introduced as a part of a picture. So many artists of repute consider the careful drawing of architectural details of little importance in the picture, leaving the same only slightly and not unfrequently incorrectly indicated. In every sketch exhibited in the gallery a proper care has been paid to the rules of perspective, so that no buildings or other features offend the eye because of careless drawing, yet none of the sketches show the mannerisms and hardness of architectural sketches of thirty years ago.

Only a few of the artists' names are readable, which is really a great advantage when reviewing an exhibition of this kind for an architectural journal.

The Mill Pond, Swanage, No. 125, is very charming and decorative in tone. No. 1 is full of interest. The distances are remarkably well indicated, the whole being impressive and not laboured by unnecessary detail. No. 2 is clever and original, although the view selected is not exactly pleasing. No. 3 is full of vitality, and, in contrast to No. 2, a very happy subject. No. 10 is also likely to find many friends and admirers. We like the bright vivid colouring. No. 4 gives a very truthful impression of foreign architecture as applied to a railway station. No. 12 is a very unusual subject to select. It would appeal to very few as a likely subject for a sketch, but as depicted in this exhibition it makes a direct appeal by reason of its absolute truth. It is a subject which might easily have been rendered in a very uninteresting manner, here, it has a distinct charm. No. 17 has much that will attract, though we should have preferred to have seen the whole sketch taken just a stage further, especially as regards the forefront. Nos. 40 and 41 are delightful, and would find a place in any exhibition where merit gained admission. No. 44 would always inspire one with a longing for something great and noble. The subject of No. 45 has frequently been attempted but rarely has the result been quite so successful. The knowledge of architecture has enabled the artist to accentuate just those features that are necessary, no attempt being made to give any of the different surface details. The atmospheric effect is wonderfully painted, and we can congratulate the artist—whoever he may be—on having accomplished this effect so cleverly. No. 46 is good on account of its extreme simplicity. No. 39 is not quite happy, it gives one the impression that the member has not succeeded in what he attempted to do. No. 22, a simple subject, treated in a straightforward manner, very successfully. No. 38 perhaps approaches most nearly a sketch one might expect from an architect. The sense of hardness is ever present. The figures could never possess life and lack all sense of modelling, being characteristic of figures one sees in the architectural room at the R.A. where the lines of the architectural work pass right through their poor bodies. No. 48 has almost the same effect as No. 44, giving one the longing to do something really satisfactory, not because these pictures are not good, but because they impress one with the magnitude of things. No. 36 has much that is pleasing, though the ripples or force of the passing currents are perhaps indicated in a little too hard a manner.

No. 26 might almost be classified as a futuristic effort, though the sky is wholly responsible for this effect. No. 50 is distinctly original and if the houses had not been quite so hard in treatment, we think the effect would have been very good indeed. The mid-distance and foreground are cleverly painted. No. 31, the tree on the right has undergone a great change since the writer visited the same place, it has also grown very much indeed. No. 29 is a charming picture of a subject which might easily present great difficulties to many artists. No. 55 is also cleverly handled. No. 89 is dull and worried and cannot be said to reach the standard of most of the other exhibits. No. 88 has much that is pleasing, though the trees in the mid-distance and hills on the horizon are not altogether well painted. Undoubtedly No. 93 is a picture of considerable merit. The subject is intensely difficult but the artist does give a very correct and truthful impression of the scene, and no feature has been unduly exaggerated. Nos. 105 and 106 are both delightfully simple in treatment, though No. 105 is perhaps a little lacking in colour. The exhibition naturally included many other very good pictures, amongst which Nos. 101, 102, 103, 104, 98, may certainly be mentioned.

Cibber's Statues of Raving and Melancholy Madness, once at Bethlem Hospital.

By Katherine Esdaile.

The news of the removal of Bethlem Hospital raises an interesting question, that of the future of its most famous works of art, those statues of Raving and Melancholy Madness which once adorned the portals of its original home in Moorfields. Few perhaps realise that these statues, "belles mais tristes," as the French Romantic Amédée Pichot found them a century ago, are now deposited at the Guildhall Museum; fewer still that for a long period they exercised a remarkable glamour over artists of far other schools, who found in them, as nowhere else in English sculpture, something of the melancholy which the eighteenth century craved, and of which the "Night Thoughts" and Gray's "Elegy" are only the most famous expression.

Yet Caius Gabriel Cibber is not a romantic figure. He married twice, his second wife having a fortune of £6,000, a large dowry in those days; he took a lodger who led him into gaming and "ruin'd him to that degree that when he cutt the Basso Relievo on the Monument in the City he then was a prisoner in the King's bench and went backwards and forwards daily on that account"; he sent his sons, Colley and Lewis, to Winchester, enforcing the latter's claim as Founder's Kin by a judicious present of a statue of William of Wykeham; and he executed statues and monuments all over England, as well as a mass of decorative carving ranging from the Phœnix over the south door of St. Paul's to the newly recovered Charles II. in Soho Square and the Blind Piper at Welcombe, who was thrown into a dead-cart during the Plague and brought to life, as Defoe tells us, by the howling of his faithful dog.

Once only, Bedlam Hospital apart, did he touch the note of tragedy. The face of the bereaved Earl of Dorset, kneeling beside his dead son at Withyham, is one of the haunting things of English sculpture, and fills the Dorset chapel with the sorrow which the neighbouring efforts of Nollekens and Chantrey fail wholly to awaken.

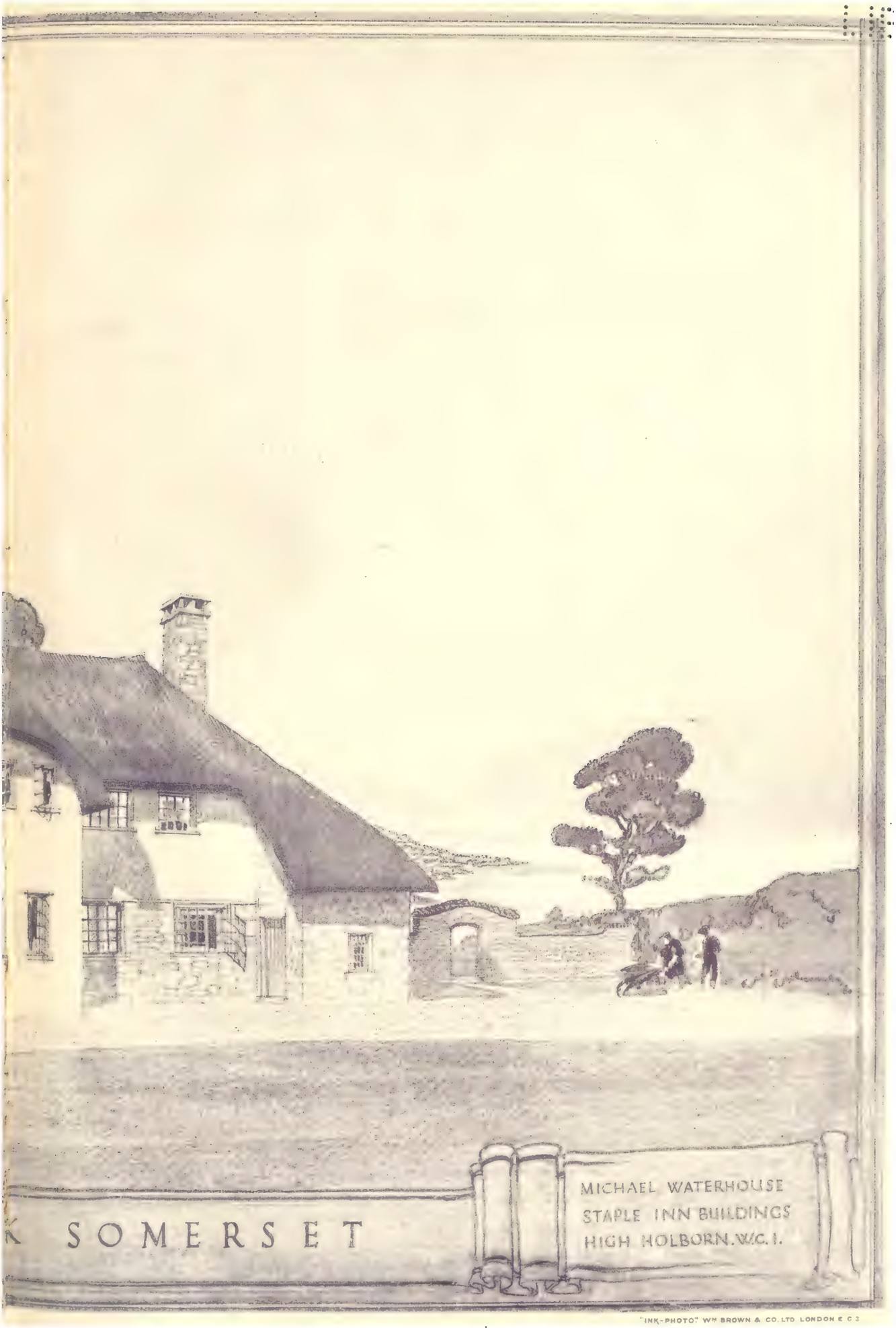
The Bedlam figures, once placed above the gates, are based on Michael Angelo's reclining allegories above the Medicean tombs in Florence, which Cibber must have seen upon his way to Rome, whither the King of Denmark, whose cabinet-maker's son he was, had sent him at his own expense to study sculpture. At present they are placed at a wrong angle, as old engravings show; nor are they improved by the black paint with which their surface has been covered since their careful restoration by the younger John Bacon as long ago as 1812. The figures, all but naked, lie upon straw mattresses, that of Raving Madness chained, the other quiet, with the vacant face of hopeless idiocy. The first, as Vertue tells us, Cibber "modelled from Oliver's porter, who was there confined, and it was very like him." If anything could add to the horror, it is the thought that Cibber took this naked howling maniac, once the proud guardian of the portals of Whitehall, from life.

Thus, sixty years before the last sad scene of the "Rake's Progress" had been painted, when Bedlam was a show and idiocy a source of heartless merriment, Cibber proclaimed the tragedy of both, and wrought them for posterity in Portland stone, "carved at once from the block," tradition says, "without any previous drawing or model whatsoever," as if the scenes and figures at the hospital had breathed fire to his usually prosaic chisel. And if, in their present state especially, they are not all we might expect when we remember that Roubiliac "never left the City without going round, sometimes considerably out of his way, to admire them," we can still perceive the high imagination which underlies them, and be thankful for the change from chains and nakedness to the thoughtful care and tendance of to-day in which Bethlem Hospital has led the way now that insanity is recognised as the saddest thing in life.

COTTAGE AT PORLOCK

COTTAGE AT POR

MICHAEL WATE L



ICK, SOMERSET.

USE, ARCHITECT.

William T. Benson

CHAIR OF STATE OF CARVED WALNUT FRENCH (LYONS) 2ND HALF OF 16TH CENTURY SCALE - HALF SIZE

"INK-PHOTO" Wm BROWN & CO LTD LONDON E C

CHAIR OF STATE OF CARVED WALNUT.

DRAWN BY WILLIAM T. BENSLYN.

R.A. 1924.

THE PLAZA THEATRE, PICCA

FRANK T. VERITY

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"INK-PHOTO" Wm BROWN & CO LTD LONDON E C 3

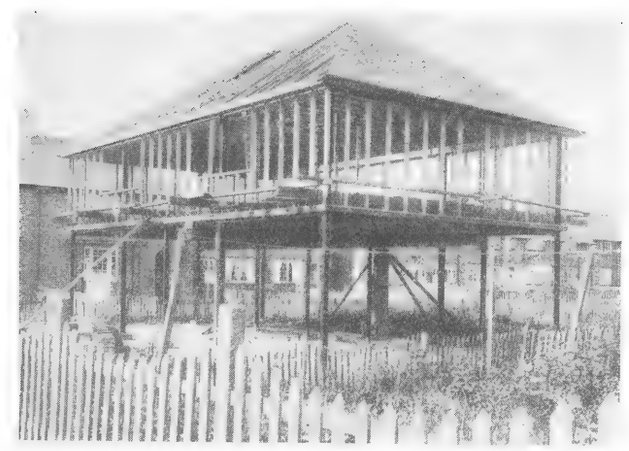
PICCADILLY CIRCUS, LONDON, W.

THE ARCHITECT.

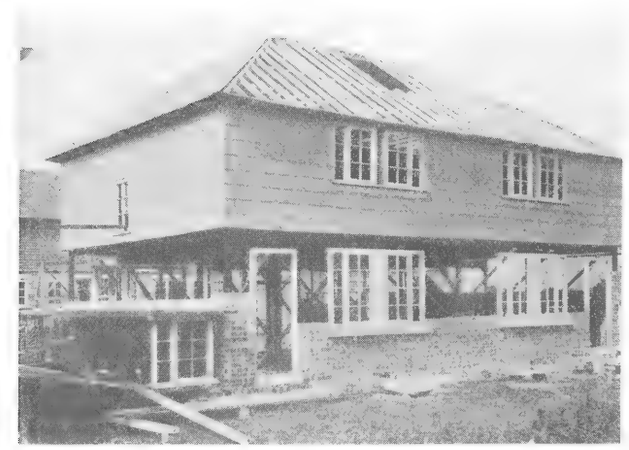
Cheaper Building V.—Wild's Steel Frame System of Construction.

This system, which was invented by Mr. Edgar Donnis, M.S.A., M.R.S.I., of 27 Clifton Street, Blackpool, who is consultant to Messrs. James Wild & Co. (Housing), Ltd., of

48 Deansgate, Manchester, who have acquired all rights and have formed a large organisation to cope with all demands. Any type of house can be carried out on this system, Messrs. Wild supplying the steel frames and cradle trusses for roofs, while one of their licensed contractors carries out the erection of the houses. The system

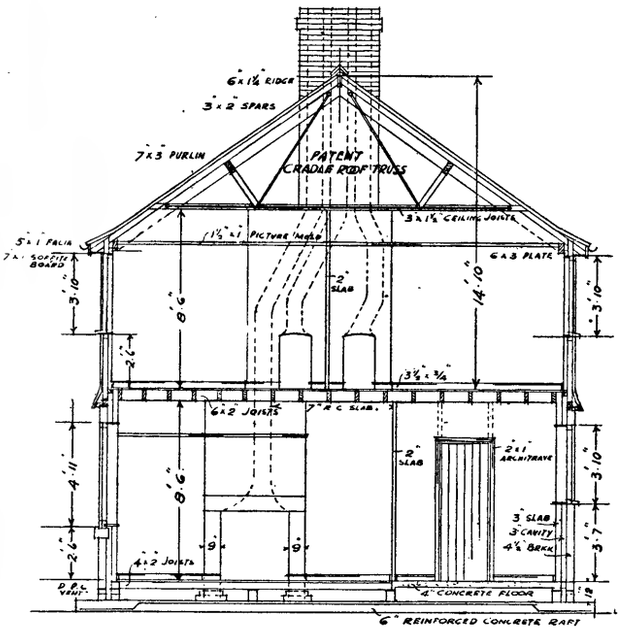


has been adopted by the Blackpool Corporation, 106 houses; the St. Helens Corporation, 60 houses; and by the authorities of York, 300 houses, and Dudley, 24 houses. The scheme is approved by the Ministry of Health and the Scottish Board of Health for the maximum loan.



The advantages claimed for it are a 50 per cent. saving in time, the elimination of 66 per cent. of bricklayers' work, and 66 per cent. of plasterers' work, a larger employment of unskilled labour, no wet time, the building at an early stage forming a cover under which work can be done. It is also particularly suitable for sites where the foundations are doubtful, and can be carried out with local labour and generally with local materials.

The system, which is best explained by the illustrations given, consists of a steel framework bolted at base to a concrete padstone, forming a reinforced raft or fender, which acts as a foundation for ground floor walls. The stanchions are arranged within the thickness of the walls and encased in concrete up to the first floor, or where desired up to the roof. The latter is a steel cradle roof supplied by Messrs. Wild.



As the first floor is carried by the framework it is possible to complete the upper storey before the work on the ground floor is commenced.

The ground floor walls consist of 4½ in. of brickwork with a cavity behind and an inner wall of breeze. The number of bricks needed is only about one-quarter that which would be employed in a brick house of the same size. The first floor walls are timber framed, damp and draught proofed and continuously lined with breeze slabs behind

the cavity. In this case they are tiled and slated externally, but alternatively they may be cement rendered or pebble-dashed on external concrete slabs. Ceilings are lined with fibrous asbestos, the internal plastering being reduced to skimming alone.

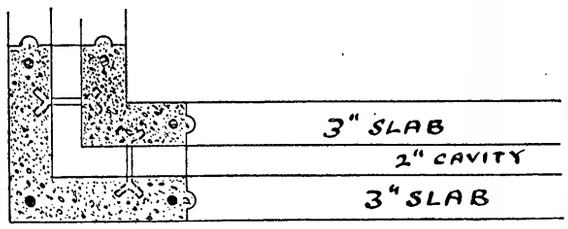
The steel frames for a block of four houses can be erected by labourers in 7 hours, after which the first floor walls and roof can be proceeded with, and by the end of the fourth day the whole of the first floor walls and roofs can be completely covered in, and it is claimed that a block of four houses can be made ready for occupation in twelve days.

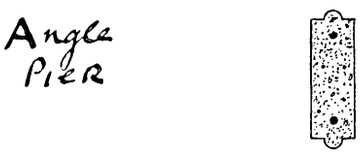
At Blackpool, with a site staff of 45 men, 80 houses have been erected in a little over four months.

The method employed is to work from the top downwards, as in a skyscraper, which is made practicable by the adoption of the steel framework.

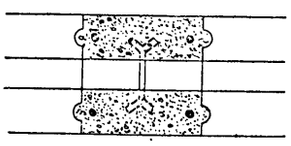
Cheaper Building VI.—Messrs. Boot's System.

Messrs. Henry Boot & Sons, Ltd., of 12 Lower Grosvenor Place, London, and 252 Moore Street, Sheffield, have brought out a very simple system of slab and panel construction which has been very extensively used with excellent results. The schemes carried out by them include West Bromwich, 600 houses; Lichfield, 276; Bilston, 438; Birmingham, 300; Uttoxeter, 144; Bulwarks, 209; Slough, 260; and various other Councils, 1,325. They have at present under construction 1,350 houses in Birmingham, 1,500 at Leicester and 700 at Bradford.

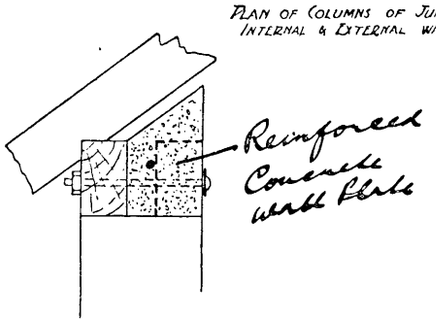




PLAN OF COLUMNS INTERNAL WALLS



PLAN OF COLUMNS OF JUNCTION OF INTERNAL & EXTERNAL WALLS.



The method of construction consists of precast concrete piers placed at angles, window and door openings. These piers are cast in wooden moulds, "wet" concrete being used and the piers have projections on the edge which correspond and fit into corresponding grooves in the intervening slabs. The slabs are made by the "semi-dry" process, usually in the standard Winget machine, and are bedded in liquid mortar, poured or brushed on. When erected the piers are held in position by wall plates resting on the top and secured to them in a suitable manner. The outer walls are continuous cavity walls, the wall plates and piers are provided with transverse recesses so as to fit together.

HOUSE BEFORE ROUGHCASTING.

HOUSE WITH ROUGHCAST FINISH.

Everything in this very simple system has been designed with a view to ensuring speed. The component parts are all manufactured on the site and the speed of manufacture is only governed by the supply of the necessary moulds. To produce 500 houses per annum is any locality it is necessary to cast the component parts for 10 houses in a week, and this can be multiplied indefinitely.

Our illustrations give the form of the units and views of houses before and after roughcasting or cementing.

FIFTY YEARS WITH ONE FIRM.—Mr. John Aldcroft entered the service of Chubb & Son's Lock and Safe Co., Ltd., on October 19, 1874, and since 1889 he has been manager of their chief North of England Branch at Manchester. He has received a letter of congratulation, signed by all the directors of the firm, and a cheque accompanies their good wishes. He was one of the founders of the Manchester and District Public Parks Bowling Association and its second Chairman. For 18 years he was hon. treasurer of the Alexandra Park Bowling Club, and also its Chairman for the greater part of that time. The members of the Club twice made presentations to him for his services. On the last occasion they presented him with a gold watch suitably inscribed.

Messrs. Methuen are publishing on October 30 "A Handbook of Housing," by Captain B. S. Townroe, who was formerly editor of "Housing," the official journal of the Ministry of Health. His book compresses into a small space a variety of technical information on all aspects of the subject. He has also obtained the help of such men as Sir Charles Ruthen, Director-General of Housing, Dr. Raymond Unwin, Mr. H. O. Weller, formerly Director of the Building Research Board, Mr. S. B. Russell, formerly chief architect at the Ministry, to provide expert nformation that will be invaluable to architects, builders, officials and members of local authorities as well as to the general public. The book will be illustrated with photographs and plans of recent cottage building.

CARNARVON.—The Town Council are submitting to the Ministry of Health a scheme for the erection of 56 houses according to plans prepared by the architect, Mr. Rowland Lloyd Jones.

CITY OF LONDON.—Property is now recommended for purchase at a cost of £22,500 to enable the scheme to be carried out for the removal of the Orphan School from Brixton.

LIMEHOUSE.—The L.C.C. Education Committee propose to proceed with the rebuilding of the St. Paul's Road elementary school at a cost of £34,000.

ILFORD.—The Ministry of Health have withdrawn their opposition to the proposed erection of a central library.

WESTGATE.—Wiltshire County Council have a scheme for the acquisition of the Leighton House and grounds of 50 acres and propose to erect an institution for mental defectives. It is suggested that accommodation should be provided for 540 patients. The cost is estimated at £90,000.

Controlling Economic Factor in Current Building.

When the economic history of the United States during the period immediately succeeding the war comes to be written, its controlling tendency will undoubtedly be described as the growth of the cities at the expense of the country and of industry at the expense of agriculture. There was a long stretch of American history ending in the last decade of the nineteenth century, in which the urban and the rural population increased at an approximately equal rate, and during which the American nation remained predominantly a democracy of land-owning farmers. Then there followed a couple of decades during which, although almost all the increase in population gathered in the cities, the agricultural population at least held its own. But since 1919 not only has all the growth in population and wealth concentrated in the cities, but the cities have been draining population and wealth away from the country. It is estimated that at least two million people who before the war were living on the land now derive their support from urban industry; and the end is not yet. Unless existing economic tendencies are checked, agriculture in America will continue to deteriorate, and may become as relatively negligible in the conomic and social life of the country as it now is in Great Britain.

These considerations are, of course, a matter of great importance to all people who derive their living from the building industry. It has enjoyed during the past five years a period of great and profitable activity. At the end of the war there was a shortage of housing of all kinds; and the shortage was increased after 1920 by the prosperity of the cities as compared to the country. Indeed, many economists believe that it was the revival of building, following as it did so quickly on the slump of 1921, which restored comparative prosperity to American industry. At any rate the volume of building has been until recently exceptionally large. Yet apparently the supply of new buildings for all purposes has not exceeded the demand. There may be no actual shortage of housing similar to that which existed in 1919, but there is certainly no surplus. Rents are still rising in most of the large towns and cities of the United States. Yet people are found who occupy the houses and pay the rents. There has been a tendency recently towards a smaller volume of general business and a slightly lower scale of prices, but business contraction, in so far as it exists, is not a reaction, as it was in 1921, from general expansion of credit and prices. It seems rather to be the indirect result of temporary excess of manufacturing and industrial energy and equipment, which enables the cities to produce more consumable goods than the country as a whole can buy at current prices.

The present business reaction may or may not endure, but it certainly suggests the wisdom of the adoption by business men connected with the building trades of certain precautions. The migration of population and wealth from the country to the city, and the consequent expansion of industrial and building operations, is not proceeding on a permanent and a wholesome basis. It has already produced a political insurrection on the part of the western farmers which is embarrassing the two older parties in carrying on the government of the country, but quite apart from its possible political effects, it is creating unmanageable conditions in the cities which cannot become much worse without bringing about an economic crisis. For one thing, the cost of housing in the larger cities is becoming so high there is no way of building habitations which really poor people can afford to occupy. For another, in cities like New York and Chicago street traffic is becoming so congested that within a few years drastic measures will have to be taken to relieve it. These measures will be enormously expensive and will increase the burden of urban taxation and the cost of urban living to an intolerable extent. There is certainly no sufficient anticipation of the critical economic and social problems which are being created by the quick and huge growth of the cities at the expense of the country.

In our opinion the result will almost inevitably be a steady slowing down of the rate of urban growth. The cities cannot continue to gain in population and wealth at the expense of the country, as the American cities have gained during the past five years, without injuring disastrously their own domestic markets and without destroying the balance of the national economic life. One of two things will necessarily happen. Either the political leaders of the country will adopt measures which will serve to prevent population and wealth from deserting the land and flocking to the city, or else the nation will find itself plunged into a subversive political agitation which will impair business prosperity and put an end to the conditions which chiefly account for the extraordinary industrial and urban expansion of the past few years.—HERBERT CROLY. *From "The Architectural Record," August*, 1924.

Book Notes.

"Sixty-Three Years of Engineering," by Sir Francis Fox. Published by John Murray (18s. net).

The main interest of this book for the architectural profession lies in Part II, entitled "Ancient Buildings." This section contains a very interesting account of the restoration of Winchester Cathedral. In conjuction with Sir Thomas Jackson, Bart., architect, the author carried out the restoration of this magnificent cathedral. The account describes in detail the work of underpinning the whole foundations and placing these on a solid concrete raft which now rests on gravel and flints. "An excavation, 5 feet in width, was then made adjacent to the south wall, in which, at a depth of about 8 feet below the turf, the bottom of the masonry foundation was reached. It was discovered that the wall had been built on logs of beechwood, in fact whole trees placed side by side horizontally, and these again, in their turn, rested in some places on a second layer of trees, forming a kind of raft. Some of these timbers were rotten, but others were as sound and good at heart as ever. This was under the Presbytery (A.D. 1202). Under the Norman walls the builders had simply driven in short vertical oak piles, none exceeding 5 or 6 feet in length." Before underpinning the Cathedral it was necessary to repair the badly cracked masonry, and this was accomplished by "grouting up" from the foundations all the cracks. The machine used is known as the Greathead grouting machine, invented by James Greathead. The author, on page 129, gives a detailed description of the machine and the other particulars dealing with this process of filling in the cracks, which is accomplished under air pressure, the material being blown into the crevices. To quote from the text, "Having thus at our command an apparatus by which cement can be blown right into the heart of any structure, whereby all the loose particles of stone and the opposite sides of the crack can be agglutinated or, more properly, cemented together." "The cost of grouting is very small and does not generally amount to the one-fifteenth or even one-twentieth part of the cost of pulling down and rebuilding." The work entailed the use of a diving costume. "Only one person could be down under water at a time, and it was with a feeling of distinct loneliness that one crawled along the bottom in pitch-black darkness." "The pits were absolutely dark owing to the water being thick with peat and also septic from the graves, and no artificial light was possible; consequently the whole of the work was done, not by sight, but by feeling and with gloves." The illustrations which accompany the description of this work give a very graphic idea of the stupendous nature of the undertaking. Every style of architecture is represented in this Cathedral, which has now been given a new lease of life. The author describes the many interesting discoveries that were made during the progress of the work. In another chapter the author deals with the restoration of Lincoln Cathedral, where the condition of the fabric was very bad indeed and can be visualised to some extent from the following quotation: "As the work of repair travelled upwards, the condition of the Norman masonry steadily grew worse until it reached such a state of disintegration that we almost abandoned hope. But with patience and the greatest care on the part of all, aided by the invaluable grouting machine, we succeeded in consolidating even the worst of the masonry. How bad that 'worst' was, will be evident when I say that much consisted of rough rubble in movement, together with great quantities of rubbish and dust." The repairs are still in progress and are under the supervision of the author and Sir Charles Nicholson, Bart., architect, and it is hoped the work will be finished in June, 1926. The author proceeds to describe his connection with the restoration work being carried out at Exeter Cathedral under the supervision of Mr. Harbottle, architect, and much useful information can be gained by studying these notes.

Chapter 14 deals with the restoration work carried out at Corhampton, near Bishop's Waltham, in Hampshire. The church is Saxon in character and was built 1,300 years ago. Some details in connection with the author's work at Bletsoe Church, near Bedford, are also of considerable interest, as also are the details of the work in connection with Lyme Regis Church, St. Mary, Bishophill Junior, York, St. Oswald's Church, Ashbourne, Derbyshire, Bow Church, Ford End Church. The author is also responsible for the preservation and repair of Portinscale Bridge, Derwentwater, and the Old Mill Bridge, near Oxenhulme.

Chapter 15 deals with the restoration of the Nurses' Home in Great Ormond Street, which was built 250 years ago, between the Jacobean and Queen Anne periods. Chapter 17 bears the title "The State of St. Paul's Cathedral," and is in the nature of a report on the present condition of the building. Quite apart from these chapters the book contains in Parts I and III much to interest the engineering world and the general public.

H. M. K.

"L.C.C. Regulations Relating to Reinforced Concrete and Steel-framed Buildings." By Ewart S. Andrews, B.Sc., etc. (London: B. T. Batsford, Ltd. 4s.).

The care that Mr. Andrews exercises in the preparation of his text books is again apparent in the present work, which has been revised and re-issued, its first appearance having been in 1915. The mere issue of the text of the L.C.C. Regulations would have been useless; the value lies in the explanatory notes prepared by the author. It needs a clear brain such as his to bring daylight into some of the cavernous phrases of the authorised version. But in one instance no explanation is offered; if we consider the three regulations, Nos. 146, 149 and 150, the first mentioned declares that the sand may consist of materials permitted under Reg. 150, whereas No. 149 says that "the term 'coarse material' means all the ingredients of the concrete except the sand, the cement, and the water." This brings about the result, that whereas the coarse material may not consist of sand, the latter *may* consist of coarse material, the difference lying in the mesh clearance. But Mr. Andrews does not offer any explanation; perhaps he thinks none is needed; we quite recognise that mesh clearance is an important factor, but even so, the wording of the clauses also requires clearance. The Regulations referring to steel-framed buildings are added, but without any explanatory notes.

"A Hundred Years of Portland Cement." By A. C. Davis, M.Inst.C.E., etc. (London: Concrete Publications Limited. Cloth, £1 1s.; leather, £1 5s.)

It is indeed fitting that the centenary of the introduction of Portland cement should be celebrated by the issue of a book recording the history and progress of the industry throughout the period.

And Mr. Davis has entered on his duties with undeniable energy and enthusiasm. It is seldom, that author and reader see altogether eye to eye, but it does not of necessity follow that the the former is wrong, and even if so, the differences of opinion are again not of necessity serious.

So far by way of introduction, after which let us hasten to add, that we have read the accompanying book with very great interest and with a full appreciation of Mr. Davis' labours.

Scattered remarks throughout the book would establish a connection between Portland cement and Portland stone upon the basis of constructional efficiency; we have always understood that the name was induced by the similarity of the colour, and this view is supported by the author from time to time.

The references to Smeaton and the Eddystone lighthouse are both appropriate and welcome; we may not doubt, however, whether he would have been well advised, even had he possessed the advantage of being able to employ Portland cement, to omit the dovetailing of the stone blocks, which have proved so successful a feature of the existing lighthouse.

In the lists of early experiments upon the cement (vide pages 88 to 94) there are numerous arithmetical errors in the reduction of pounds per square inch into tons per square feet; these will need careful revision.

A fact of note in connection with Portland cement is the ability to substitute rubble masonry for ashlar, from the mere standpoint of solid efficiency.

We note the author's paragraph referring to the pre-Union method of labour in chamber-kiln loading, and regret the disappearance of such halcyon days of free labour.

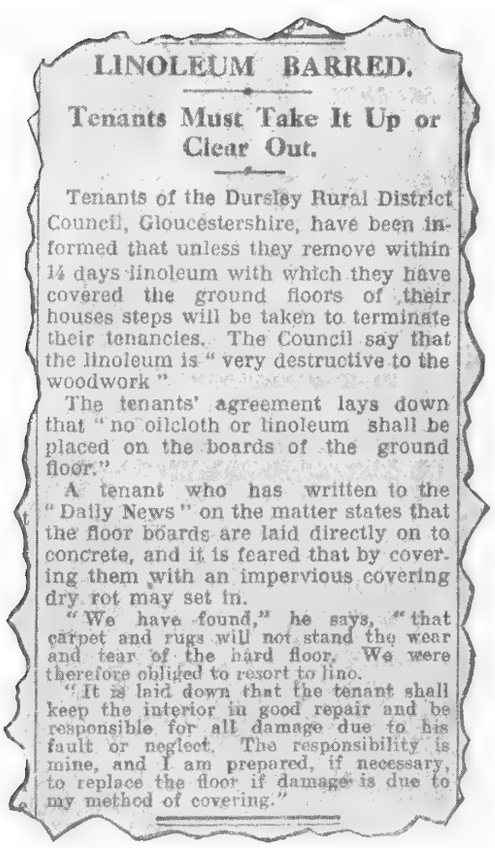
There is an element of humour in the idea that the standard specification follows, instead of leading, the quality of cement marketed.

The list of patent specifications is a good feature with which to bring to a close a volume replete with interesting history and information.

THE NEW CRITERION, REGENT STREET. W. Woodward & Sons, Architects for the building. Elevations by Sir Reginald Blomfield, R.A.

LINOLEUM AND DRY ROT

Cutting from Daily Press, 30/9/24.



LINOLEUM BARRED.

Tenants Must Take It Up or Clear Out.

Tenants of the Dursley Rural District Council, Gloucestershire, have been informed that unless they remove within 14 days linoleum with which they have covered the ground floors of their houses steps will be taken to terminate their tenancies. The Council say that the linoleum is "very destructive to the woodwork."

The tenants' agreement lays down that "no oilcloth or linoleum shall be placed on the boards of the ground floor."

A tenant who has written to the "Daily News" on the matter states that the floor boards are laid directly on to concrete, and it is feared that by covering them with an impervious covering dry rot may set in.

"We have found," he says, "that carpet and rugs will not stand the wear and tear of the hard floor. We were therefore obliged to resort to lino.

"It is laid down that the tenant shall keep the interior in good repair and be responsible for all damage due to his fault or neglect. The responsibility is mine, and I am prepared, if necessary, to replace the floor if damage is due to my method of covering."

A SOLIGNUM stained wooden floor is proof against decay—including dry rot—even if embedded direct on to concrete and overlaid with linoleum.

When a floor is to be covered with linoleum use Exterior Solignum.

A 2/6 tin is sufficient for an ordinary floor—apply liberally with a brush—no heating—no preparation—leave 24 hours and rub down briskly with a cloth. The linoleum can then be laid.

A tin of Solignum is cheaper than a cartload of timber.

If you have any trouble, write to us.

Sole Manufacturers,
MAJOR & Coy. Ltd.
Enquiries to:—
205, Borough High St., London, S.E.1.

SOLIGNUM Reg.

Wood Preserving Stain, 18 Colours.

Correspondence

[The Editor will not be responsible for the opinions expressed by Correspondents.]

A Pound of Plan, Please.

To the Editor of THE ARCHITECT.

SIR,—The time when architecture, so far as concerns the building of houses, would become commercialised, seems not far off. The vision of the architect selling over the counter in shirt sleeves and white apron from seried nests of drawers, duly marked and indexed, a pound of type B house plan with a piece of indiarubber as make-weight, seems no product of a heated imagination but one likely to come true. The quest of the moment seems to be for an economical form of construction. Once found—and who can doubt it will be found—the matter is simplicity itself. Legislation may follow readily, and there will be no other form acceptable.

Here is the opportunity of a lifetime to some ingenious inventor. Once his invention, be it concrete blocks, steel sheeting, or compressed offal, is adopted, his fortune is made, Its use will be universal and the housing problem solved. How delightful!

That there was no housing problem except that of finding tenants and purchasers before the era of Government interference is a fact lost sight of in the frenzied socialistic search for solutions. That private enterprise more than supplied the country's need when untrammelled with restrictions is never recognised. The fixed thought is that without standardisation nothing can be right, consequently houses must be standardised and all will be well.

In these circumstances it would seem that the designer of houses will be left without occupation. He will be well advised to seek some other means of making a living or to design the headstone for his last resting-place and to be placed therein.

There is one consolation for him, one last chance before taking this final step. The search for the philosopher's stone will no doubt be all open and above board. The matter will surely be put out to competition, so that the very best may be found. Being a Government undertaking there can be no hole-and-corner business, and the unsuccessful competitors will at least have the satisfaction of knowing that the best man has won and that the cause of building has been served by their sacrifice.

It is to be hoped that before any type of construction is adopted every invention known to the science of house building will be thoroughly sifted. For there is no reason to assume because certain materials have served for centuries that there exist none others suitable for use in the future.

Nevertheless, though I may be prejudiced, I cannot but feel that when the research is complete and the award made, standardisation will result in a depreciation of the artistic merits of the new towns and villages to be; for one of the chief charms of our countryside at least is the varied nature of the designs to be met with. True that this is a commercial age, and we may be old fashioned, but it is true that many of us do still cling to individuality in building, for the work of the real craftsman still makes a strong appeal and we do not wish it otherwise.

Yours faithfully,

H. BRYANT NEWBOLD, M.S.A., A.I.Struct.E.

Travelling Studentships.

To architectural students, Alexander Thomson Travelling Studentship, value £60; also possible second prize. Open to architectural students between the ages of 19 and 28 years, residing in the United Kingdom. Full particulars may be had on application to the subscriber. WILLIAM MACLEAN, Secretary, 21 West George Street, Glasgow, C.2.

The following tenders were received for alterations and additions at Court House and Polytechnic, Tottenham, Mr. Crothall, F.R.I.B.A., architect:—Stewart, J., & Sons, Tottenham*, £2,682; Monk, A., Lower Edmonton, N., £2,735; Porter, A., Ltd., Tottenham, N., £2,793; Godson, G., & Sons, Ltd., Kilburn Lane, W.10, £2,809; Knight, H., & Son, Tottenham, N., £2,880; Lawrence, W., & Sons, Ltd., Finsbury Square, E.C., £2,905; Groves, G., & Son, Tottenham, £2,906; Fairhead, A., & Sons, Enfield, N., £2,934; Newby, C. J., & Bros., Southgate, £3,014; Maddison, W. J., Ltd., Minories, £3,026. *Recommended for acceptance.

COULSDON.—Plans passed: 14 houses, Southwood Avenue, for Messrs. Thomas & Sons.

OXFORD.—Mr. J. R. Wilkins has submitted plans for additions to the Eye Hospital.

General News.

BLACKPOOL.—Plans approved by the Corporation:—The Blackpool Co-operative Society, Ltd, for the erection of three houses and one shop in Highfield Road and Longford Road and alterations to 209 Layton Lane; plans by own staff.—Queen's Square Buildings, Ltd., for thirteen shops forming arcade off Promenade and Strand, plans prepared by Mr. Halstead Best, architect, 87 Church Street, who has also prepared plans for the erection of two large detached houses on New Park Road.—The District Bank, Limited, 15 Spring Gardens, Manchester, for new bank premises in Lytham Road, plans prepared by Messrs. Jones & Dalrymple, architects, 178 Oxford Road, Manchester. Contract placed with Messrs. William Eaves & Co., Ltd., builders, Blackpool.—Mr. James Gregson, builder, Villa Rose, 3 Bank Street, Marton, has in view the erection of eleven shops on a site at Waterloo Road.—Messrs. R. Fielding & Son, builders, 14 Queen Street, Blackpool, are proposing the erection of twenty-two houses on a site at Bedford Road.

BRIGHTON.—An expenditure of £18,000 is proposed for the improvement of the Lower Esplanade west of the West Pier. The plan shows the construction of a new promenade.—Plans have been prepared for a school for 350 at Moulescomb at a cost of £12,800.—New sub-stations and plant for the electricity department are reported to involve an outlay of £78,747.—Steps are to be taken to secure land for the erection of an additional 500 houses.—The Surveyor is preparing plans for the tidal bathing pool scheme.—The preparation is advocated of a scheme for new slipper baths and a swimming bath in a central position.—Plans passed: 14 houses, Franklin Road, for Mr. Mitchell; 6 houses, Down Terrace, for Mr. J. Brayben.

CHELTENHAM.—Tenders are to be invited for the erection of from 10 to 15 pairs of non-parlour houses and Mesrs. Smithson & Rainger are to prepare the necessary layout plan.

CHORLEY.—Messrs. Biram & Fletcher, architects, are to amend the preliminary plans for improving St. Mary's School on lines suggested by the Board of Education.—Plans are to be prepared for an open air school.—Mr. Percy Howard, architect, of Manchester, who had prepared plans for the proposed public baths, is to be asked if modifications are possible.—The Borough Surveyor is to prepare plans for an open-air bath in Astley Park.

HAYDOCK.—Lancashire Education Committee are making a grant of £8,700 towards the cost of a proposed new technical school as part of a war memorial.

ILFORD.—The Urban District Council are to erect 12 houses on land near the electricity works at a cost of £8,400.—The Ministry of Health have now sanctioned the scheme for the erection of a central library and the Surveyor has accordingly been asked to prepare plans, etc.—Plans passed: 5 houses, Hatch Lane, for Mr. W. Butcher; 18 houses, Kingston Road, for Sunnyside Development Syndicate; 14 houses, Fairholme Road, for Mr. A. P. Griggs; 9 houses, Green Lane, for Mr. F. Hitchcock; 15 houses, Kingston Road, for Mr. Vaughan; 15 houses, Colombo Road, for Mr. F. Harrison; 24 houses, Perth Road, for Suburban Developments, Ltd., ; 4 houses, Breamore Road, for Messrs. Harber & Cox; 38 houses, Avery Gardens, for Messrs. Brand, Ltd.; 36 houses, Staines Road, for Mr. W. Davies; 8 houses, Levett Gardens, for Mr. W. H. Knox; 4 houses, Parkway, for Mr. Knox.

MANCHESTER.—The Courts Joint Committee is providing additional accommodation at the Manchester Assize Courts for the use of lady barristers at a cost of £2,500.

PETERBOROUGH.—Plans passed: 4 houses, Fairfield Road, for Messrs. Corner & Campion; store rooms, Bull Hotel, Westgate, for Messrs. Paton & Co.,; shops, etc., Mansion House site, for Mr. G. C. Fitzwilliam; compressor shed, Wagon Works, for Moy's Wagon Co.—The Borough Surveyor is to prepare plans for as many houses as possible on sites at Orchard Street, Queen's Walk and South View Road.

OLDHAM.—Mr. Fred Thorpe, architect, District Bank Chambers. The erection of a Council School in Ward Street. Tenders are now being invited.

SOUTH SHIELDS.—The Borough Engineer has prepared a scheme for the layout of Gypsies Green at a cost of £16,000.—Tea rooms are to be erected at North Foreshore at a cost of £7,500.—The Education Committee are considering plans and estimates for a school of art, the governors having intimated that costs of schemes would be as follows: brick building, £5,416; concrete building, £4,874; neat durable building with wood framing lined inside with asbestos sheeting, asbestos tiled roof, £2,500.—The Council are to contribute towards the cost of a new bridge across the river Don at a cost of £20,000—Plans passed: alterations Empire Theatre to provide dwelling house for manager for Moss Empires, Ltd.

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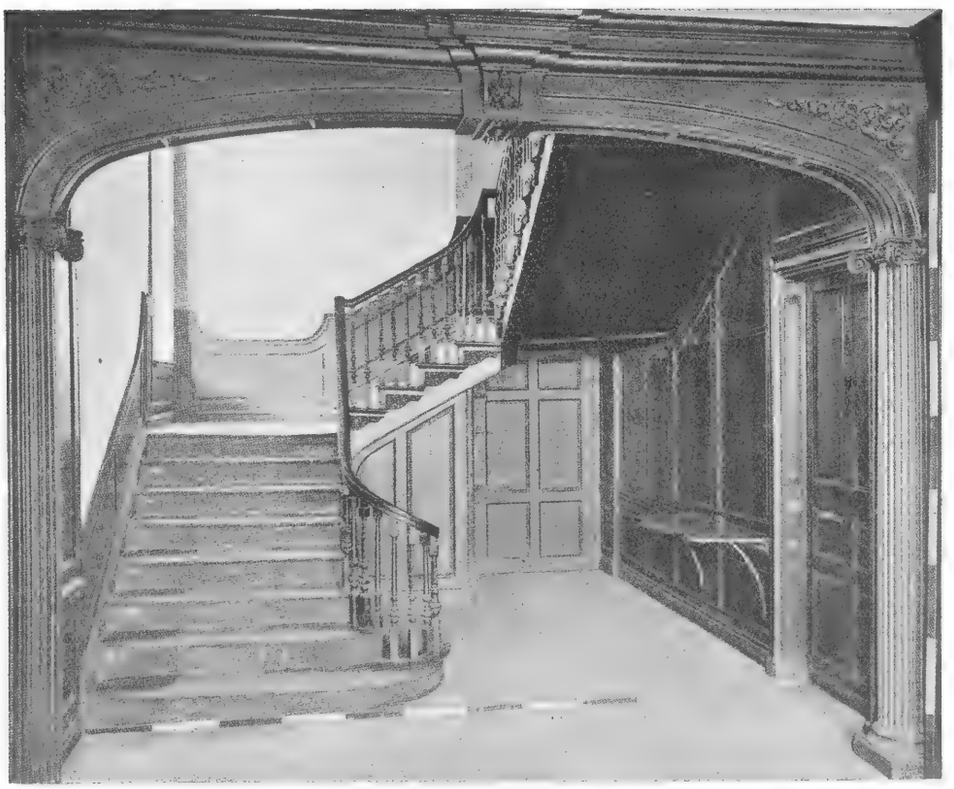
The Eighteenth Century Architecture of Bristol.*



No. 1 TRINITY STREET, BRISTOL: ENTRANCE HALL.

The study of the eighteenth century buildings in any of our towns is the study of a phase of work which, apart from more complicated requirements of modern building work, is as suitable now as it was a couple of centuries ago.

Unless we look forward to the replacement of our buildings by giant structures like those of America, we can see no reason to think that we can do better than to carry on the traditions of the Georgian epoch. The most prominent feature of the architecture of the eighteenth century was its perfect adaptation to what we now call town planning, or the arrangement of adjacent buildings with respect to their effect as a whole, and town planning is destined to be the greatest of architectural factors and considerations in the near future. Our eighteenth century architecture demonstrates that buildings need not be complicated or elaborate in detail and design to create architectural effect, but must be nicely adjusted in their relation to one another. Its strong point lies in its collective rather than individual effects, and in its perfect adaptation to changing commercial requirements.

Mr. Dening's book consists of a carefully collected series of examples of work of the eighteenth century in Bristol, coupled with some introductory chapters dealing with architecture as a whole and simply defining the main facts relating to it in a manner intelligible to the layman. In this his object is the reasonable and praiseworthy one of making his fellow citizens realise the nature of the subject of which eighteenth century buildings are but a phase. If this could be done for every district and city in the country, it would doubtless directly educate many laymen through their localised interest in their immediate surroundings, to their benefit and that of the architects who carry out their work. The great strength behind the work of the eighteenth century was the fact that it was the joint result of the work of the craftsmen of the age and was understood and appreciated by those for whom it was produced. It was not the result of the enthusiasm of a few, but of the reasoned belief of a community, and represented the outcome of a civilisation which, while defective and backward in some respects judged from modern standpoints, was infinitely more homogeneous than our own age. The nearest parallel to such a state was probably that of the Roman Empire in the height of its power and influence. Craftsmanship, too, was employed not in the older manner by independent guilds of workers, whose efforts resulted in the great cathedrals of the Middle Ages, but under conditions more akin to those of to-day.

We cannot if we would recapture the inspiration of past ages of faith; we have no longer the influence of an

* "The Eighteenth Century Architecture of Bristol." By C. F. W. Dening, F.R.I.B.A., R.W.A. Messrs. J. W. Arrowsmith, Quay Street, Bristol. £2 12s. 6d. net.

No. 1 TRINITY STREET, BRISTOL.

all-powerful Church to dominate the activities of mankind and having in its keeping the keys of the future world; but eighteenth century records show what can be effected by a reasoned belief in order, by commonly understood standards in practical matters, and by a sound and well-reasoned conviction in the advantage of employing good materials and workmanship. As Mr. Burton says in his admirably written introduction: "The Georgian period insisted on seeing everything in a clear light. What it could not understand it rejected. By thus defining the scope of its imagination it evolved a race of artists and subsidiary craftsmen who played into each other's hands by concentrating all their subtlety on those qualities which convey a sense of equipoise and refined pleasure, never distracting or fatiguing the eye. That is why the characteristic eighteenth century *ensemble* appeals to the cultivated mind, especially in the region of the domestic crafts. It is restful. From time to time we need stimulus, but we do not want to live on stimulants."

This seems to us to be what we want to-day if we analyse things, and what many are trying to do is to live on "stimulants."

We may lash ourselves up into a spurious enthusiasm for this or that artistic development, but what we really want is the steady production of buildings which are reasonable and pleasing, if sometimes commonplace, but in the carrying out of which we may gradually hope to build up a nucleus of good craftsmen who will, despite the appliances of an age of machinery, learn to think intelligently and to reinforce our efforts. We may not be able to add poetry to the work of past ages, but we may learn to express ourselves in very readable prose.

Bristol, unlike its neighbour, Bath, does not give us a great vision of the more splendid conceptions of the time, but, as Mr. Dening shows, it is rich in quiet work of good character in good doorways, chimneypieces, and staircases and delicately modelled plaster work.

The author considers that the remodelling of Bath by Woods is responsible for a number of schemes in Bristol and for the development of its squares. The Crescent at Bath finds a reflection in the Royal York Crescent, and a gigantic scheme was prepared for laying out Tyndall's Park and a field adjoining with a crescent, squares and terraces. About 68 acres were purchased in 1791 from Tyndall's estate, and foundations were put in, but the financial panic following the outbreak of the war with France brought ruin to the chief promoters. The walls were levelled to the ground and the site reverted to the Tyndall family, and so ended a project which might have ended in a closer architectural rivalry with Bath. Bristol also, from its greater commercial importance, suffered more heavily than Bath in the destruction of the ordered design of the eighteenth century during the iconoclastic epoch of sixty years ago.

William Halfpenny was the best known architect of the time whose name is directly associated with Bristol, and Halfpenny, though a creditable designer, was in no sense a distinguished architect, and the work of the century connected with Bristol is evidence of the spirit of an age when craftsmanship still occupied its proper place in our national life. An advance in the general standard of architectural design will be the outcome now, as it was then, of a general levelling up, understood and appreciated both by the craftsmen of the day and the client whose commissions we execute, rather than of the sporadic work of the gifted designer. It matters comparatively little if we achieve this if we employ as our forefathers did rules and regulations to direct our efforts. An advance can only be made by the general understanding and acceptation of a system of precedent, and the most valuable period to study is that of the eighteenth century. Nor is there any real reason why the unrest of society and changing social conditions need be reflected in corresponding disturbances in architectural design. If in that we can inculcate a feeling of harmony and restfulness it will be doubly attractive in an unrestful age, and any development required for the wants of that age will come gradually without conscious effort on our part. Harmonious forms will always please the eye, as they pleased our forefathers, who did not attempt to read symbolism into them.

R.I.B.A. (Alfred Bossom) Travelling Studentship.

Associates of the Royal Institute of British Architects who have not passed through one of the Schools included in the competition are required to deliver their designs and report (in competition for a silver medal) at the Royal Institute not later than 5 p.m. on Monday, December 1, 1924.

The following are the Schools included in the competition:—The Architectural Association (London), University of London School of Architecture, Robert Gordon's Colleges, Aberdeen, Glasgow School of Architecture, University of Liverpool School of Architecture, University of Manchester School of Architecture, McGill University, Montreal, School of Architecture, Edinburgh College of Art, the Technical College, Cardiff, the Polytechnic, Regent Street, W.1, Northern Polytechnic Institute, Holloway, L.C.C. School of Building, Brixton.

SUTTON BONINGTON (NOTTS).—The governors of the Midland Agricultural College have promoted a scheme for centring all the branches of the activities of the College at Sutton, where it is proposed to build dairy buildings and a hostel for women students and additional buildings at Lodge Farm, at a cost of £43,000.

OSSETT.—Mr. Edeson, the Town Council's architect, has prepared plans for the new elementary school at Gawthorpe. The school is estimated to cost £12,500.

Our Illustrations.

"THE BRAMBLES," FIFE ROAD, EAST SHEEN, S.W. GEORGE W. SMITH, Architect.

"THE BRAMBLES," FIFE ROAD, EAST SHEEN, S.W. GEORGE W. SMITH, Architect.

"The Brambles," Fife Road, East Sheen, S.W.

GEORGE W. SMITH, F.S.A., Architect.

"The Brambles," East Sheen, has been built for Charles E. Morris, Esq., and stands on half an acre of ground overlooking Richmond Park. The facing bricks are a soft-toned silver-grey, and the centre portion of the front and back elevations have been treated with cement and distemper. The ornament on the front elevation was modelled *in situ*, the motive being the bramble.

The windows consist of wood frames fitted with steel sashes and glazed with leaded lights. The front entrance doors are in English oak; the interior woodwork is in Oregon pine. The contractor was William Lowe, 190 Castelnau, Barnes, S.W. The facing bricks were supplied by S. & E. Collier, Ltd., Reading.

The bay window as shown in the above illustration is a special feature in the house, the metal casements being of superior standard type supplied by the Morris Westminster Guild, Rochester House, Rochester Row, S.W. The grates and chimney pieces were supplied by Messrs. Doulton & Co., Ltd., Lambeth, S.W., and the Teale Fireplace Co., Ltd., 28 Berners Street, W.1. The heating installation and hot water supply was carried out by Messrs. John Blakie & Son, 24 Fitzroy Square, W. The general ironmongery was supplied by Messrs. Nettlefold & Sons, Ltd., 54 High Holborn. The roofing tiles were manufactured by Messrs. G. W. Lewis, Ltd., Stockford, Nuneaton. The sanitary fittings were manufactured and fitted by Doulton & Co., Ltd., Lambeth, S.W. Mr. Charles A. Purbrook, sculptor, was responsible for the modelled frieze illustrating the bramble which is to be seen on the front elevation over the main entrance.

Notes and Comments.

State Security for Private Building.

Mr. John Murray, who is usually very sound on questions of finance relating to building, writes to "The Times" to suggest that housing difficulties might be largely ended if the new Government would guarantee the interest on all mortgage money advanced by anyone to building owners on the security of approved houses, flats and housing schemes, letting the existing machinery of private enterprise do the rest.

The mortgage interest to be higher than the usual two-thirds and the interest limit to be higher than War Loan interest. The Government would guarantee the mortgage interest for a period of years on approved and independent valuers' reports obtained by mortgagees in the usual way. A small fee in each case would be payable to the Government for the guarantee; this would go towards administrative costs.

If the interest payable by the owner was in arrears for six months the Government would have the right to require preclosure, retaining a lien on the price obtained in payment of its advances.

We think on some such lines as those suggested a useful measure might be passed.

Housing.

We imagine that the Housing policy of the new Government, especially since Mr. Neville Chamberlain is to occupy his former post, is likely to take the form of the continuation of the Act formerly passed with possibly a few modifications, but it is not clear what will happen in respect to Mr. Wheatley's recent measure which has now been passed into law but under the provisions of which nothing has been done. Will it be repealed ? If not, it would presumably be within the power of local authorities to put its clauses in operation. But it is greatly to be hoped now that we have a Government with a long term of office assured that any measure adopted should be unchanged for that period in order that its faults and wants may be proved. It is not beyond the bounds of possibility that before this Government have to appeal once more to the electorate that the housing question may be ended.

The R.I.B.A. and Pupilage.

The R.I.B.A. has issued a circular advising its members not to take pupils until they have qualified by becoming Licentiates of the Institute. This seems to us to be wholly desirable in view of the fact that the avenues of architectural employment are somewhat congested and that the output of the architectural schools is now so large. Also, the work which is necessary before a man can qualify as a Licentiate of the Institute is considerable and should give some indication whether the student should take up the calling or not. He is, we are afraid, unlikely to abandon it if he has once been articled and paid a premium, even if he has doubts of the wisdom of his choice. We quite agree also that the course suggested is likely to assist the cause of Architectural Education and for that and other reasons we hope it will be acted upon.

Street Widening.

We learn that in the rebuilding of the devastated area of Tokyo street widening, as a means for the prevention of future fires, is considered to be of the first importance. Every property holder in the affected districts is to be forced to give up one-tenth of the area of their sites for this object without receiving any compensation !

A prominent feature of the new plan is the cutting of a great semi-circular road through the heart of the business quarters of the city which will almost completely encircle the Imperial palace which occupies the centre of Tokyo. The avenue will carry the greater part of the city's traffic in an outer circle. The total area of new roads and avenues will amount to rather more than $1\frac{1}{4}$ square miles and in making them the houses of 300,000 people will be demolished. The total area of all the widened streets when finished will amount to nearly 13 square miles, which area, however, includes a large market, parks and open spaces.

We doubt whether the proposals for compulsory widening without compensation would be popular in the City of London !

Bricks.

The truth about the condition of the brick trade seems to be that there is at present a shortage due to the difficulty of meeting immediate demands, and that where water carriage is available a good many foreign bricks—mostly Dutch—are being imported and used at prices which are a little below those of Flettons. But it is pointed out that brickmakers can readily increase their supplies, and will do so, when they can gauge the real demands likely to be made upon them. The shutting down of the Addison housing scheme left the brickmakers with large stocks on their hands, and very naturally they do not want to be placed in the same position a second time. But it is not considered that the importation of foreign bricks will become a permanent thing, and meanwhile the brickmakers do not regard what they know is a temporary condition with any feeling of fear or hostility. Difficulty also arises because it is impossible to ensure the delivery of bricks of the exact English sizes, a factor which adds to the cost and difficulty of using them.

A Garden City Mystery.

There appears to be a singular hoax which has been staged for the benefit of the curious. It was announced that a great garden city was to be erected near Buckingham, which was to cost a quarter of a million. Local contracts were signed and material delivered. Every house was to have its own piano, but the landlord of the site and the piano manufacturer mentioned have both denied knowledge of the transaction. Pink posters have now been displayed announcing that on November 17 a farcical absurdity will be given, the characters in which are associated with the stranger who set the scheme on foot nine months ago. The characters include Mr. Contractor, a builder; Mr. Bitter, landlord of the Builders' Arms ; Mr. Green, a mystery man ; Mr. Blue, another mystery man. Other characters in the piece include contractors, builders and carters, as well as other local characters too numerous to mention. One scene is to be an office at the Builders' Arms ; the others are Nowhere or Anywhere. But there is more. Scenery to the value of £25 is said to have been bought, but is now advertised for sale in theatrical papers. Like many hoaxes, there appears to be a singular lack of real humour about the whole affair.

"The Architect" Fifty Years Ago.

NOVEMBER 14, 1874.

THE THEORY OF EXPULSION FROM THE INSTITUTE OF ARCHITECTS.

The term *expulsion* is one which is too severe for the occasion, but it is the only phrase employed in the bye-laws, and must therefore be accepted. In fact the removal of a member's name from the list, except in one event alone, is really little more than an act of disfranchisement, founded on certain specific technical grounds which do not affect his honour, but refer merely to his free choice of a line of business which is objected to ; and the one event in which he may perchance find himself really thrust out of the society to his personal discredit is so vaguely specified that up to the present time no sort of illustration has attached to the phraseology of the rule—that is to say, nobody has ever been expelled upon this particular ground. Our readers may therefore be interested just now in being informed a little in detail as to the actual bearings of the subject.

When the Institute was established about five and forty years ago, it was chiefly under the energetic guidance of Professor Donaldson, then a young man ; and another similar society, called the Architectural Association, was set on foot as a rival, of which the master spirit was the late Sir William Tite, who was also in the flower of his youth. Mr. Donaldson and his friends aimed at an aristocratic connection, and procured Earl de Grey for a president ; Mr. Tite and his following flew at still higher game, and got the Duke of Sussex. After some years of competition, the two societies became amalgamated ; the Royal Duke graciously gave way ; and the popular and influential Earl became the first President of the combined corporation, then established by Royal Charter under the name of "The Institute of British Architects"—the prefix *Royal* being afterwards employed by ursurpation on the strength of Her Majesty having consented to be the Patroness, until, a very few years ago, Mr. Beresford Hope discovered that it was unauthorised in law and took measures to obtain the express sanction of the Crown for the use of the adjective of supreme honour. These particulars will justify the reader in supposing that an institution so dignified must have been founded upon a basis of corresponding pretensions.

At that time it would appear that two of the more particular desires of the leaders of the architectural profession were to draw a very distinct line of demarcation between the architect and the measuring surveyor, and to discourage the practice of the architect making surreptitious profits. Accordingly, before a member, whether Fellow or Associate, is admitted after election, he is required to sign a written declaration to the effect that he "will not accept any pecuniary consideration or emolument from any builder or other tradesman" whose works he superintends, nor "have any interest or participation in any trade contract or materials supplied" for such works ; and further, in the case of a Fellow, that he "will not be engaged in the measurement, valuation or estimation of any works" except those of his own designing or such as he may be employed to adjudicate upon as a referee—it being thus left open to measuring surveyors to be Associates but no more.

BRIGHTON.—The Education Committee recommend the erection of an elementary school at Moulsecoomb.

Sir T. G. Jackson, R.A.

The death of Sir Thomas Graham Jackson leaves a great gap in the ranks of those architects who have earned great literary distinction as well as great positions as practising architects. His great age for he was born in 1835—seemed in no way to impair an energy and interest in life which were phenomenal, and it is only recently we commented on the series of historical works which, illustrated by his own drawings and embodying his *credo*, were full of interest to the reader and a remarkable instance of his deep erudition.

He may be said in a manner to have been born to the purple and his bent of thought and the character of his work was undoubtedly largely influenced by his close associations with Oxford. His collegiate career was a most distinguished one, for he obtained a scholarship at Wadham which he held till 1864, when he was elected a Fellow. He was elected an Associate of the Academy in 1892 and an Academician four years later, and he was a D.C.L. of Oxford and LL.D. of Cambridge. His achievements secured his colleagues' full recognition in 1910, when the Institute Gold Medal was awarded to him, while his interest in, and knowledge of, the crafts was evidenced by the fact that he was for a time the Master of the Art Workers' Guild. He took a great interest in the subject of education and was a member of the Board of Architectural Education. His training was more determined and governed by his travels and direct investigation than by the fact that he passed through Sir Gilbert Scott's office, which he entered in 1858, for he started independent practice in 1862. His architectural works thus cover a span of some sixty years, a period of unrest and change which naturally finds some reflection in his work. This very largely indicates the contemporary disposition to find inspiration in the amalgam of style which succeeded the mediæval epoch and, as shown by his writings, he had little sympathy with the more classical type of work which is now a marked tendency in design. Judged by standards of to-day his work may seem to be sometimes unduly playful or fanciful, but it was always inspired by a ripe knowledge of and love for the precedents of a most interesting historical period. His achievements, when judged from the only fair standpoint—the contemporary one—stand very high, and the work which many are doing to-day would have been impossible of achievement were it not that he and others had prepared the way by their pioneer effort. He carried out much church work, both in the form of restorations and in that of new buildings, while in Oxford, his *alma mater*, his list of works include the new Radcliffe Library, new buildings at Brasenose, additions to Lincoln, Trinity, Balliol, Hertford and Corpus, the City High School and the High School for Girls. At Cambridge he carried out a Law Library, Law Schools and the Sedgwick Museum and Laboratories. His restoration of Great Malvern Priory may be cited as an admirable instance of the great care and taste which marked his work. His writings on Dalmatia secured him the commission to restore the campanile of the Cathedral at Zara, which was completed in 1892.

Sir Thomas Jackson undoubtedly greatly strengthened the position of the calling he belonged to at Oxford. He was *persona grata* there by reason of his scholarship, and because of it he was enabled to enlist the sympathy and interest of other scholars in architectural subjects at a time when additional buildings were needed for their colleges. The influence of his life and work is largely responsible for the greater care now displayed in the choice of architects to add to or restore historic buildings.

Of him it may be said that few men have worked with more tireless assiduity and few have more thoroughly earned the regard and esteem of those whom he was brought into contact with, and his achievements have honoured the profession to which he belonged.

MANSFIELD.—Notts County Education Committee have authorised the preparation of plans for a technical school on the Ashfield House site. The new school will embody the Mining department, towards which a grant of £9,700 has been promised by the Miners' Welfare Fund.

The Custom of the Country.—II.

A Plea for the Rudimentary, Simple Architecture of Old Provence.

By Francis Miltoun.

A FARM GATE IN PROVENCE.

About the only Roman influence in modern building in southern France is that employed in the stations of the new P.L.M. railway line from Estaque to Miramas. Modified but little from the classic silhouette of their ancient prototypes, these stations are veritable little gallo-romain houses worthy of all emulation and not too remote from what we think of as Provencal to remain well within the framing.

Marseilles within the past few years has uncovered just behind the Bourse an area hitherto overbuilt by some two hundred condemned dwellings. Across the excavation which resulted there were to be seen four successive stages of ancient and mediæval building. First, that of the Phoceans; then that of the Romans superimposed thereon (the Greeks in their turn built but little); next, foundations of an imposing structure of the middle ages which, in other respects, had disappeared; finally, at the end of the vista, the modern post office building of some considerable proportions but of no style at all. This is the chronology of Marseilles architecture.

All elements are occasionally found incorporated in a single structure, but the strictly modern is often bereft of anything which gives it distinction of a nature later than that of the equivocal taste of the time of Louis-Philippe—the red plush and green repp "citizen-king," or that of Louis Napoleon which was hardly better. Marseilles tells the story. The abortions of the Cannebière are no worse, at any rate, and while the Rue de la Republique is a magnificent thoroughfare its architectural aspect is dull and drab, which ought not to be in the Royaume du Soleil.

Of civic structures of their class where is there anything more reminiscent of its setting than the hotels de ville of Toulon and Marseilles, the first with Pierre Puget's magnificent carytides, the second so distinctly of its epoch, that of a seventeenth century elegance and graciousness. At Aix-en-Provence are a whole battery of seventeenth century town and country houses whose embellishments of sculptured stone and forged iron have not even got beyond local renown.

Modern churches have often been deemed ugly; doubtless they are to no small degree when compared with their elders. But it is entirely creditable to Marseilles that she has helped beauty to return to the temple. The modern Byzantine cathedral of Saint Marie Majeur, built so recently as the last half of the nineteenth century, is the largest and latest cathedral built in France. It is wholly in keeping with the spirit of its climate, sea and sky. The fact that it surplombes the grimy, workaday Joliette docks detracts little from the virtues of its reason for being, for it simply replaces an ancestor which was there before it some ten centuries ago, what remains being still preserved as a memorial link with the past, its three naves and their *nervures cubiques* being considered unique. Marseilles was spared a modern Gothic horror when Leon Vandoyer built the massive nave and transepts of the present church, If it lacks the stone sculptured iconography of the moyen-age fabrics it is still something which harks back farther than the secessionist and iconoclastic movement in religious architecture.

Rural architecture is, or should be, typic of a country and its people, of a region and its inhabitants. From an ancient tome one quotes the following apropos of the Provencal country-house. It might apply as well to-day to those of its epoch still existing, and they are many.

"My father-in-law had no chateau—a simple *maison de campagne*, merely, snuggled close under a sunny hillside, at the entrance to a green-carpeted valley. Four walls of rubble stone with a revetment of time-yellowed cement, roofed with curved tiles of an adorable red."

"The windows were pierced here and there haphazard, with heavy *volets* painted green. The surrounding garden was a veritable '*jardin de Provence*,' enclosed by low walls of rough stone with here and there a strata of cobble picturesquely inlaid after the unique idea of some genius of a mason whose art must have died with him."

"The house had a stone *perron*, or terrace, before it and behind was a sheltering row of wind-break cypresses."

The cypress, as a sign of welcome, was often planted two by two at the gate posts at the roadway, or before the terrace, nearer the house. They were set out before the portal of church and chapel, but most frequently have they been used in Provence as a shelter against the north wind, the *mistral*, in rows running east and west or thereabouts, scarcely ever north and south.

CAGNES, A HILL TOWN OF THE VAR.

Leave the cypress behind and you leave Provence. Or, as the poet Frederic Mistral put it: "Our *patrie* is bounded only by the ramparts of its cypress hedges." How, then, has the designer or builder of houses in these parts the temerity to run a riot of gables and pignons in his theme when nature has furnished the same sky-piercing fleches and pinnacles?

One is at first confused by the contrasting architectural types of this fair land of Provence, until, reasoning, he concludes that one and all are born of the climate—which is perhaps a truism which should go without saying. Anyway, the observation applies as well to the *mas*, or farmhouse, and the hillside *cabanon* (the sister of the Languedocian bastide) as it does of the stately *hotels privées* of that magnificent tree-tunnelled Cours Mirabeau at Aix, the papal architecture of Avignon or the feudal fortress of Beaucaire or that of Saint André at Villeneuve.

The same charm is found also in Vauban's Fort Carré at Antibes and, greatly is the fact to be emblazoned, in a tiny dwelling recently erected after the conventional Provencal style along the Corniche d'Or, not far east of Fréjus.

There is a walled farm and its dependencies at Barbentan, between Avignon and Tarascon, which is to be seen from the railway, which for grandeur of simplicity is as typical as anything to be found in the humble rural architecture of Provence.

At Segonnaux, in the plain of Arles, is a remarkably composed *chateau-ferme*, with its dwelling house, its granary, stable, courtyard, and well-head which requires little imagination to reconstruct into a modern day country-house without indeed the trouble of redesigning and with very little rebuilding. As a model for a Riviera villa it would be ideal if anyone would only take the trouble to think about it.

At Mouriès, in the plain below the ruined Renaissance splendour of the mountain Pompeii of Les Baux, is another *mas*, or farmhouse, with little enough the aspect of a chateau but of a breadth of outline which ranks it as one of the big country houses of Provence. It is the property of a certain Révoil family, whose head, in his time, was an ambassador abroad and author of a precious folio on "Les Eglises Romanes en Provence."

Almost anywhere on and off the beaten track the amateur and home-lover and the professional house designer alike will find much of suggestive adaptability, either of constructive or of decorative elements, ranging from the ground plan of the abandoned Chartreuse de Montrieux to the minor detail of a spiral staircase which instead of being round or oval is square and box-like; or perhaps a hooded chimney of unusual design, big enough to sit in the corner.

Much there is that lies between. The *style provencal* applies not only to ground plan and silhouette but to interior arrangements and furnishings. A convent-like cloister may aligne the courtyard and an angular soaring staircase may climb unabashed from the entrance-hall-living-room. The hooded fireplace is as much an architectural attainment as it is an accessory of utility, and if the *bahut* and *panetier* hung on the side wall are actually separate entities it is because Provencal custom was to make them such instead of having them built in the wall as are the oaken beds of the peasants of Brittany.

The Museon Arlatan at Arles shows all this in a way which few museums do tell their story, and the Vieux Provence museum in the Parc Borelly at Marseilles is hardly second thereto. It is difficult to separate Provencal constructive elements from their accessories. It is doubtful if the term "decorative art" ever entered into the Provencal mind in the design and embellishment of the house, but it is there in all its finest expression, decorative by its simplicity—crudity, even. Appropriateness again!

An occasional Provencal town has an arcaded street, as at Tarascon or Roquebrun-sur-Argens, called often Saracen, but no more Saracen than are the same arched galleries of Flanders. That they are found in Provence is right and proper and in the spirit of the picture as they are at San Remo and along the Italian Riviera. The marvel is that they have not been employed more in the modern construction of these parts—the "loggia" of the new "Garden of Shops" on the Croisette at Cannes being about the only example one recalls, and that but an effiminate reminder of that wonderful short length of street in old Tarascon, so seldom seen by ordinary travellers who mostly either stop at Tarascon to change trains for the Bordelais or do not stop at all if they are *en auto*.

Throughout the Rhône valley, from Valence to Marseilles and all along the coast eastward to the Italian frontier, to Aix en Provence and north-east through the lower foothills of the Basses Alpes and Haut Provence the typic Provencal country house presents itself with but little variation except as one draws up on the big towns and civilization. Then it falls off—hollow tile and brick, with machine-made door

and window framings, lacking the loving marks of the hammer and the draw-knife, corrugated iron replacing the tiles of the roof. An impression rather more shocking here than of jerry-building elsewhere. Sisteron in the Alps, on the fringe of upper Provence, has the same mediæval cachet as Entrevaux or Roquebrune, Cagnes or Villeneuve-Loubet on the coast.

West of the Rhône, in the Camargue plain, there crop up from the arid soil farmhouses and even an occasional chateau, remarkable both for silhouette and ground plan. The Chateau d'Avignon, near Saint Gilles, is one of the noble country houses of Provence. If it lacks the imposing

CARYTIDES OF THE PORTAL OF THE HOTEL ESPANET AT AIX.

lines of the actually smaller pavillion Vendome at Aix-en-Provence it is only because its outline is so different.

The Provencal house, to remain strictly within its limits, takes into account local atmosphere, sky, colour, nature's surrounding embellishments, and the usage to which it is put. These elements are perhaps not the appanage of Provencal dwellings alone; they may well apply to any climatic district, region or country; but here, at least, they have been observed, until the most recent times, with a fulness of application which is not to be ignored. Perhaps this was achieved by reason of local inspiration, perhaps by hazard, but the picture composes well in almost every case.

If further proof were wanted one has only to check-up on the growth of the popularity of the now plainly recognised Provencal School of Painting, dating, in its intensified sense, from the day when Cezanne first limned the red-roofed farm houses of the countryside of Aix and the cubicle-like *cabanons* of Allauch and Cassis. Since then his followers have been many. Provence has come into its own already in the world of art.

Farther east, not far distant from the track of winter tourist travel, there are what the sentimentalists call the "rock villages" of the hinterland of the Riviera—Gordes: Gattières and Carros; Puget-Thèniers, Entrevaux and Touët le Beuil. While here the structures grey down in tone and lose something of the high colour of those of the valleys of the Rhône and the Durance, they still cling in perceptible fashion to that specious aspect which is certainly not Saracen and is no more Italian than it is strictly Provencal. Let us call it Mediterranean for want of a better term, from which inspiration the Provencal builders of their best period certainly drew their initiative and invention.

Book Notes.

"John Francis Bentley." By W. W. Scott-Moncrieff. (London: Ernest Benn, Ltd., Bouverie Street, E.C. 10s. 6d. net.)

Many of us will be glad to possess a series of photographs of Bentley's work, though it might be added that fuller illustrations of Westminster Cathedral would have pleased us better than the number devoted to the Church of Corpus Christi, Brixton, and Beaumont College. Neither of them works in the same category of excellence as the Church of the Holy Rood at Watford or Westminster Cathedral. The later decoration of the Cathedral, notably that of St. Andrew's Chapel, is surely worthy of full illustration, for though we hear frequently that architects wish the bare brickwork might be left untouched, there is no doubt that had Bentley lived he would have been largely occupied with the same task as that which Mr. Weir and others have been occupied with—the completion of the design on Byzantine lines with marble casings. The greatness or defects of a design cannot be accurately judged until it is carried to completion on the appointed lines. Other designers may fail to adequately carry out Bentley's conception, but there can be little dispute as to the nature of the conception itself.

Mr. Moncrieff has written with warmth and force of the nature of Bentley's work and the spirit which he assumes inspired it, bus he has almost entirely omitted to give light on a great personality. Thus we have no picture of Bentley's career or the rungs of opportunity surmounted in his life, all of which are vital to character as displayed in design. Like the German's thesis on the camel we have Mr. Moncrieff's thesis on the subject of Bentley, but like the thesis referred to the matter is treated subjectively and not objectively. Such a method is hardly vivid or convincing.

We have fallen into the habit of condemning the nineteenth century as a soulless age, perhaps forgetting that men in one age differ from those of another in small degrees rather than fundamentally. In all ages and all times men have striven for individual and selfish gain and the great majority have cared little for æsthetic and high moral standards. Wherever wealth has been accumulated, whether by despots or churches, or by an aristocracy, expenditure on great building schemes has been made possible, and fortunately throughout the greater length of history living tradition in craftsmanship has rendered the task of master designers an easier one than it was during the last century; but commercialism in itself never has and never will destroy art. We believe that great architects, like other men, are usually shrewd and practical rather than imaginative dreamers and enthusiasts. They are of the same clay as their fellow men, but more forceful and industrious in using the whole of the talents confided to their care.

"Structural Design in Steel Frame Buildings." By P. J. Waldram. (London: B. T. Batsford, Ltd. 12s. 6d.)

The author of this useful book states, in his preface, that the primary object aimed at in the selection of the various examples is the solution of those problems which frequently arise in design under the Act, and are not dealt with in ordinary text-books. That he knows his subject is fully evident, and doubtless his work will be consulted by many who feel that their knowledge is inadequate to deal with some particular problem arising within the scope of their own practice.

After an introductory chapter, the author deals successively with the cases of a large compound girder, a riveted plate girder, a stanchion carrying eccentric loads, grillage foundations, wall stanchion carrying main floor girder, and a steel mansard roof rib. Several practical appendixes follow, concluding with extracts from L.C.C. (General Powers) Act, 1909, referring to steel frame structures.

One curious error (not an oversight, for it appears invariably) is the treatment of the word "data" as being singular, and not plural, but as this does not affect the practical contents, it cannot be said to depreciate the value of the book. The labour devoted to the preparation of these articles is self-apparent. If in places the figures in calculation do not quite tally with one's own arithmetical efforts, the differences at any rate have not been found to be serious. Attention may, however, be drawn to an error on page 17 (third line of sub-headings) where the word "Fixed" should be substituted for "Hinged."

Registration Laws.

By William P. Bannister, F.A.I.A.

Chairman of Committee on Registration Laws, American Institute of Architects. (*From the "American Architect."*)

FOREWORD.

There are men who gladly set aside their own convenience that those who follow may have a sure foundation. There are those who believe that as they have grown, so should others. They who have grown like the trees of the forest, killing the less fit in the shade of their mighty branches.

We have a great company of persons who seek to earn their daily bread in our fascinating work. They exist, but labour in distress and disappointment. When they entered the lists they believed that they were prepared for the battle. Possibly haste to utilise the knowledge which they possessed blinded them to its limitations. Others with real genius aspired too high in the beginning, missed their mark and failed to appreciate the value of the smaller steps in the approach to their goal. Others were so critical of the efforts of their contemporaries that they were blinded to the good which would have been their salvation if intelligently noted. All of these and many others borne down by heavy burdens in life live as but sickly plants in the shadow of stalwart growth—a growth gained by fundamental talent fed by good instruction in the school and office. Architecture has no monopoly in these classes within its ranks, but most of those who have grown in the sunshine of their occupation feel a desire in their hearts to give to the beginner something from his strength to help him take good root. Whether or not they should seek to accomplish their altruistic purpose by law will ever be a subject of debate, but in this debate it must always be borne in mind that the people of the state are party to the effort to raise the standards of competency. In the first instance the citizenry are involved in the fundamentals: life, health, comfort and beauty. They pay for all the mistakes in the struggles of the incompetent and the untrained. They pay in property loss, they suffer in health, comfort, and sometimes lose life.

For this reason we cannot set aside such appeals to legislation, we cannot consider the question entirely from the point of view of the welfare of the architect except in so far as that welfare reacts for the benefit of all people. Naturally the architect looks to the law as a help to him; he believes that he is competent and should be protected from competition with the incompetent. Sometimes he sets a value on the ability of his competitor which is not complimentary, to say the least. Registration laws are a disappointment to him because his self-estimate is disregarded. He forgets that society and not he is the important consideration. The placing of a law involving mental training into active operation is not the work of a day or year, but is the work of many, many years.

For purposes of immediate operation hundreds are recognised as having a minimum ability which comes within the range of the average of the standard of practice at the time of the adoption of an educational law. To hold to the theory of law, that what has been established in the past must not be overlooked by an act of the present, the theory of retroactive legislation, all unfortunate conditions of the past are accepted. An able mind has suggested "That it is better to let error live than to kill love." So might it be said that it is better to let incompetence live than to destroy effort leading to competence. This is the conclusion of the lawmakers, so the door is always left open for a short period that the weak may have shelter.

These folks from the byways by their presence disturb many of those comfortably within the fold, but many of us know that they can contribute something to those complacent in their self-estimation. The working of the law in effect is that there may be no more wanderers in the byways. Those who enter the field of our occupation must have healthy trained minds, eager to serve and appreciative of their obligation to the people of the states. As those who are of low standing on the ladder of competency pass away it would seem that we can look for a lot of bright-eyed, healthy young folks to take their places on the lower rungs. The question to be answered is, how can this be brought about? The answer is education in its broad and technical sense. We know that schooling and statutes cannot add to intelligence, but we also know that schooling is a necessary tool for the service of intelligence. Education does not seem to affect moral character, and law cannot curb human propensity to violate true ethics except when the offence is by statute either a felony or misdemeanour; registration laws do intervene to an extent. Many persons do things which in effect are far worse than acts deemed criminal in law. A lawyer may be held as a criminal because of barratry, while a person may nag and torture his wife (or the other way round) and not be committing a crime under the law, but cause others to lead a life of misery far more harmful than barratry in effect. So society can do no more in its relations with architects than to insist that they enter the premises with the proper tools of their occupation. The law fixes the courses for the education of an architect which it is believed will serve best—preliminary schooling and technical training. When an analysis of these requirements is made it must always be borne in mind that educational laws deal only with the minimum, maximum being inconceivable.

Considering preliminary education as the foundation, it is interesting to note the value placed on schooling in the statutes. In seven states and Hawaii no standard of preliminary education is established. In several states the student who seeks to begin the practice of architecture must have graduated from a high school whether his studies are to begin in an architect's office or in a school of architecture. Thus we have laws requiring no preliminary education, laws requiring but little, as in the state of Tennessee, which requires ability "to speak and write the English language." In several states the laws require the acquirement of a knowledge of mathematics, history and language gained subsequent to graduation from high school, but usually during the term of technical study, which is equal to that training in these subjects which a student would receive in the first two years of college work. It is a curious fact that the standard of technical training is about the same in all the states, yet many states ask the student to take a technical examination which he could never pass unless he had had a good preliminary education, notwithstanding that the statute of the states makes no mention of preliminary schooling. This raises the question of the necessity of providing by law a specification of what that preliminary training should be. The American Institute of Architects has expressed its opinion, and that opinion prevails in some states and not in others. The law must point out in advance what schooling must be had that the student may understand the formulas in his technical studies, otherwise he would be at a great disadvantage in an attempt to follow on. He should not be led up a blind alley and left there.

In a future article a comparative review of the laws will be made as to their requirements for preliminary and technical schooling. Suggestion will also be made which may help those who wish to engage in inter-state practice, for it seems to be a fact that any really competent architect can practise in any state if he studies the law. The person who has his or her certificate of registration seldom finds fault with the laws. It is the person who has neglected to obtain his certificate or who has been declared incompetent who usually does the most fault-finding.

MANCHESTER.—The Libraries Committee recommend the erection of a library on a site at Withington at a cost of £15,500.

AYLESBURY.—The railway companies have now decided to reconstruct the railway station, having arranged a contract with Messrs. Henry Willmott & Sons, Ltd., of Hitchin. It is understood that the scheme will cost £40,000 and be completed in 12 or 18 months.

FACADE FROM THE SOUTH: KEARNY HIGH SCHOOL, KEARNY, N.J. GUILBERT & BETELLE, Architects.
From "The American Architect."

The Surveyors' Institution.

Extracts from the Opening Address by Sir Edwin Savill, O.B.E. (President).

The Surveyors' Institution was established in a year which to me was of the greatest importance, and which no doubt had considerable influence upon my future, for on November 4 in that year I was born.

By reference to our Charter we find that the Institution of Surveyors was established for the following objects:

(*a*) To secure the advancement and to facilitate the acquisition of that knowledge which constitutes the profession of a surveyor, namely, the art of determining the value of all descriptions of landed and house property and of the various interests therein, the practice of managing and developing estates, and the science of admeasuring and delineating the physical features of the earth.

(*b*) To promote the general interests of the profession and to maintain and extend its usefulness for the public advantage.

In 1882 it was deemed advisable that the surveyor, besides acquiring the science of measuring and delineating the physical features of the earth, should go a little beyond mere nature and understand the science of measuring and estimating artificers' work. This latter addition became the more necessary when the Surveyors' Institution and the Quantity Surveyors' Association became amalgamated, and in a supplemental Charter, dated October 24, 1921, a further addition was made to the knowledge which it was thought well a surveyor should possess, and the word "mineral" was inserted between "land" and "house property."

I am quite certain that anyone reading the foregoing definition would be left in a very ignorant condition as to the work which a surveyor may be called upon to do, but some idea of the problems which face a surveyor may be gathered from the syllabus of our examinations, in which it will be found that an attempt is made to divide the subjects under four main heads—viz., Land Agency, Valuation, Building and Quantities, and Mining. The following are the subjects a knowledge of which has to be acquired for the purpose of examinations under one or other of the divisions:

Surveying, levelling and trigonometry; book-keeping; law of landlord and tenant; agriculture; construction and arrangement of farm homesteads; land drainage; forestry, timber valuing and measuring; geology and composition of soils; agricultural chemistry; local taxation; imperial taxation; agricultural botany; agricultural valuation; law of arbitration; agricultural law; mensuration; law of fixtures; law of dilapidations; law of easements and riparian rights; application and use of valuation tables; copyhold tenure and enfranchisement; drainage and sanitation; development of building estates; Acts for compulsory purchase of property; law of vendors and purchasers; bills of quantities; constructive and working drawings; house drainage and plumbers' work; composition and properties of building materials; heating and ventilation; London Building Acts; Public Health Acts and Local Government Acts; iron and timber roofs; specifications of buildings; principles of mine surveying; Acts and Orders for the regulation of Mines; common law as to ownership of minerals and rights of support; mine rents and royalties; support and subsidence; advance surface and drive surveying; valuation of mineral properties and the damage caused by mining operations; leases, covenants, assignments, etc.; laws of mines and minerals.

The grouping of subjects would appear to assist the young surveyor in choosing the branch of the profession he wishes to take up, and, by the study requisite to secure a pass in the examination, to make him as proficient as possible in them. But he is very much mistaken if he thinks that having obtained some knowledge of his particular branch he can ignore the other branches. Our profession cannot be put into watertight compartments, there is continual overlapping. For instance, the country land agent may be appointed to an estate upon which there is certain land having prospective building value and also land under which are valuable minerals, while, on the other hand, the urban man may find that he is called upon to advise on the purchase of a market garden or to measure up and value a wood for the purpose of the sale of an estate.

I now propose for the benefit of the public and perhaps of some of our younger members to give an outline of the work which comes into an ordinary office in the course of a year, and I have set it out so as to emphasise its diversity. It must be remembered that when we are consulted by a client it is useless for us to say, as the members of another learned profession are able to do, "I think this is a matter upon which counsel should be consulted," because in our profession there are no counsel, and we have to rely upon our own knowledge and that of those who are associated with us in our offices.

I feel that after a perusal of the work which an ordinary individual is asked to advise upon two remarks will be made, "What an interesting profession yours must be," and "However do you know it all?" In reply to the first I should say it is the most delightful and interesting pro-

VIEW FROM GALLERY: KEARNY HIGH SCHOOL, KEARNY, N.J.

fession existing. The answer to the second is short and obvious, and I will leave it to your imagination.

In the course of a year a surveyor in general practice may have the following problems to solve :

(1) An area of land taken by the Government for the purpose of a poison gas experimental ground : what is the value of the land taken, and what is the consequential damage to the residence and estate owing to the proximity of bursting shells containing mustard gas ? (2) Land with a depth of 10 ft. taken to widen the High Street in a country town : what is the value of the land taken, and what is the damage to the shop, building and business ? (3) The supervision of the erection of an office building in the City of London covering an area of 5,000 ft.; (4) the supervision of the erection of a cowshed in Hampshire ; (5) the valuation for death duties of a London estate of over 1,000 houses, entailing the valuation of freeholds in possession, and calculating reversions over periods from two to sixty years ; (6) the valuation and sale of furniture in a suburban house ; (7) to give an approximate estimate, to be completed in two days, of the cost of acquiring for a public undertaking 200 acres of land in a commercial centre, much of it occupied by factories and other industrial concerns ; (8) to assess the value of an easement for a sewer through a commercial estate in an urban district, and the consequential damage caused by partial severance ; (9) the lotting and sale of a country estate of 5,000 acres, with the necessary valuation for fixing reserves ; (10) to assess the rental of a warehouse in the docks area ; (11) to assess the value of land to be acquired by a public authority for road-making purposes in an agricultural district, and the settlement of the necessary accommodation works ; (12) to prepare an agreement for letting a farm in Cheshire ; (13) to assess the value of the waiving of a restriction prohibiting building on a commercial piece of land at the date of the purchase twenty years ago ; (14) to assess the value of the licensing restrictions on a suburban estate ; (15) to assess the compensation to be paid on the compulsory acquisition for power generation of well-known waterfalls ; (16) to assess the compensation payable for damage to light and air by the erection of a factory adjoining a suburban cottage ; (17) the reinstatement of an agricultural property after occupation by the War Office for military purposes ; (18) the preparation and checking of an inventory for a furnished letting ; and so on.

As I have already said, the answer to the observation " What a lot to know " is short and obvious, but if it will not be considered presumptive on my part, I would like to put before the younger members of the Institution a few hints and suggestions which may be useful to them.

How is this knowledge to be acquired ?

In every large office there are specialists—men who have devoted the whole of their time and energies to one subject, and who have become experts in their particular line, and I think the young man should ask himself " Shall I become a specialist, and, if so, in what subject, or shall I generalise and become as proficient as I am able in several ? " The answer to those questions must depend upon many things. If a man is succeeding to an established business he should obtain as intimate a knowledge as he can on the greatest variety of subjects. If the business to which he is succeeding is a specialised business, such as rating or quantity surveying, he must of necessity pay particular attention to those subjects, but even in that case the more diverse his knowledge the more capable he is of handling the many problems involved, and he will certainly find the work far more interesting and his opportunities for advancement largely increased.

The less fortunate man who has no business to which to succeed is a more difficult case, and he can arrive at a decision only after the most careful consideration. If he has a bent in any particular direction he should certainly become a specialist, or if he succeeds in acquiring a true knowledge of his subject he is never likely to find any difficulty in obtaining a post, and it should be remembered that a man who is a real expert in his particular line can command a salary which the man in a similar position cannot hope to obtain with a general knowledge only.

But, it will be asked, must a man to be successful take up a single subject and limit his activities to that subject for the whole of his life ? By no means, if he is really proficient in one particular line he will be able to obtain a post in a firm with a general practice in which he will have an opportunity of gaining a varied experience in any of the subjects which take his fancy, many of which he will have met with when studying for his examinations.

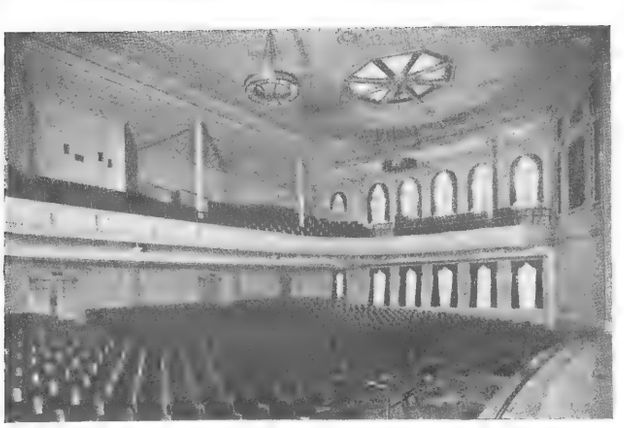
It should be remembered that in all business there is no holding back the man of ability who has determined to get on, and I think this applies to our business more than most, for the reason that it is so complicated and diversified that any man who comes within a measurable distance of mastering its ramifications must come to the top.

* * * * *

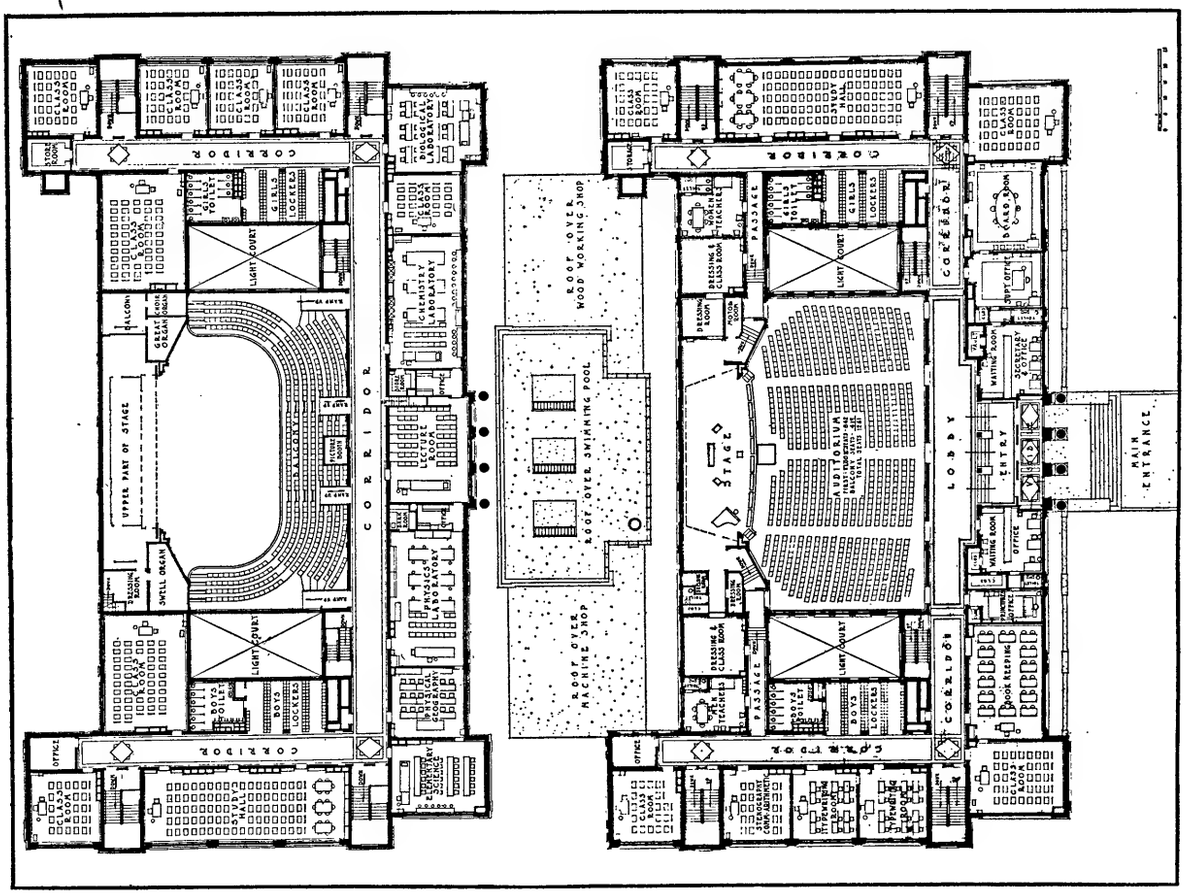
There are two pieces of advice I would like to give : Firstly, don't be frightened of asking questions, however silly they may turn out to be and however much they may display your ignorance. Later the time will come when it is advisable to ask sensible questions only—questions which display your knowledge and not your ignorance : but when that time comes your opportunities for picking up odd bits of information are far more limited. Therefore, ask your questions, register the answers firmly in your memory, and don't ask the same question twice.

The second piece of advice I would give you is, guess—on all and every occasion, guess. The principal work of a surveyor is to form estimates—at least, as we grow older we like to call them estimates—and the more we guess when we are young the better will be our guesses or estimates when we are older. When you are young, if your guesses are to be of value to you, you must be in a position to check the accuracy of your calculations. When you are older your estimate is very often checked for you, sometimes with unhappy results.

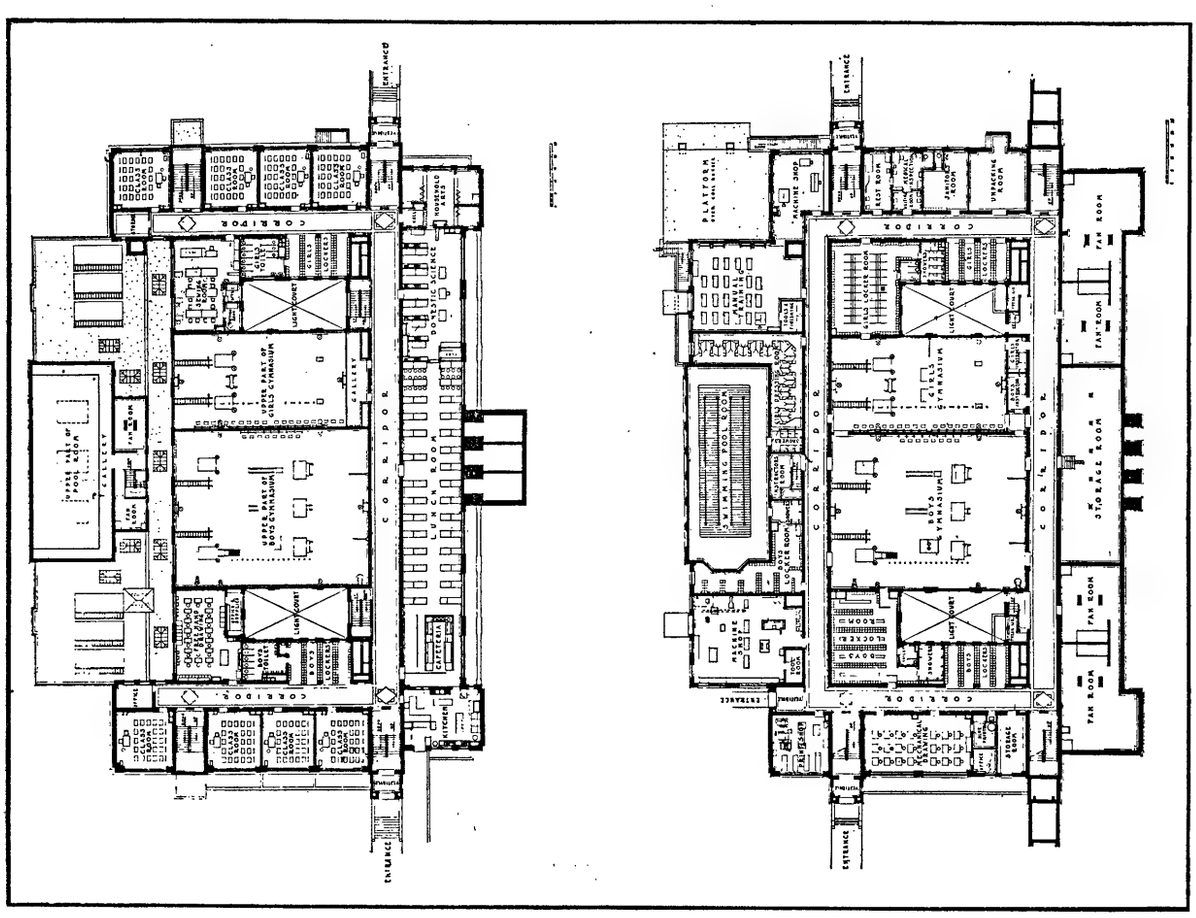
You will, no doubt, if you have made friends with your associates, be taken out to assist in various classes of work. Say it is a case of dilapidations. You should make an



VIEW FROM STAGE : KEARNY HIGH SCHOOL, KEARNY, N.J
GUILBERT & BETELLE, Architects.
From "The American Architect."



GROUND AND FIRST FLOOR PLANS.



LOWER GROUND AND BASEMENT FLOORS.

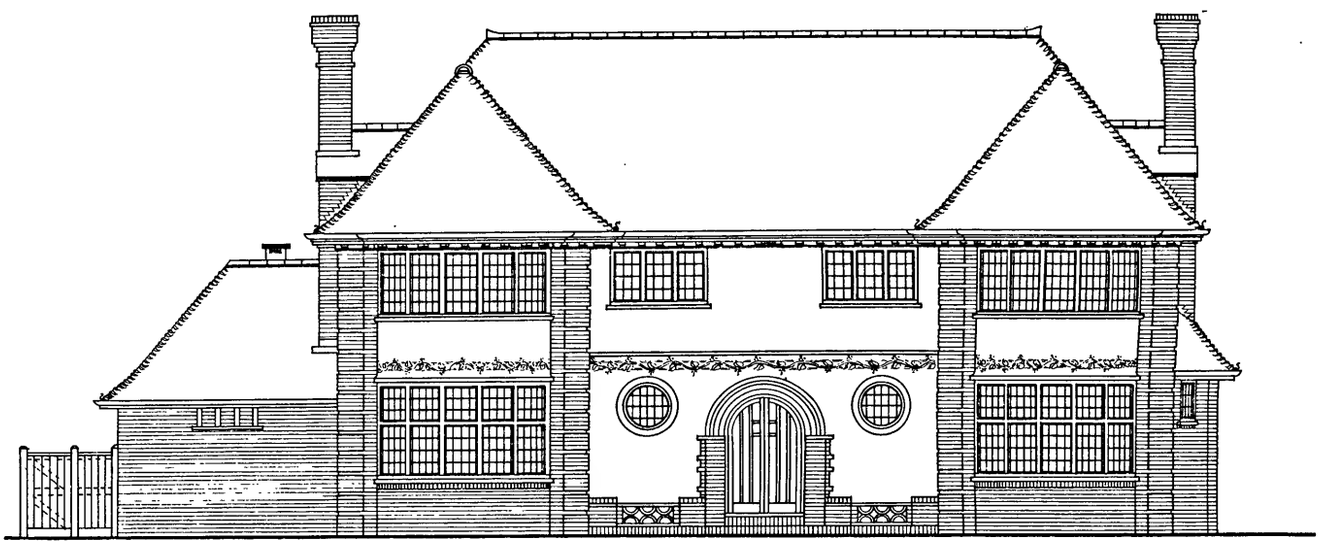
KEARNY HIGH SCHOOL, KEARNY, N.J. GUILBERT & BETELLE, Architects.

From "The American Architect," October, 1924.

"INK-PHOTO" WM BROWN & CO LTD LONDON, E C 3.

THE BRAMBLES. FIFE ROAD, EAST SHEEN. LONDON, S.W.

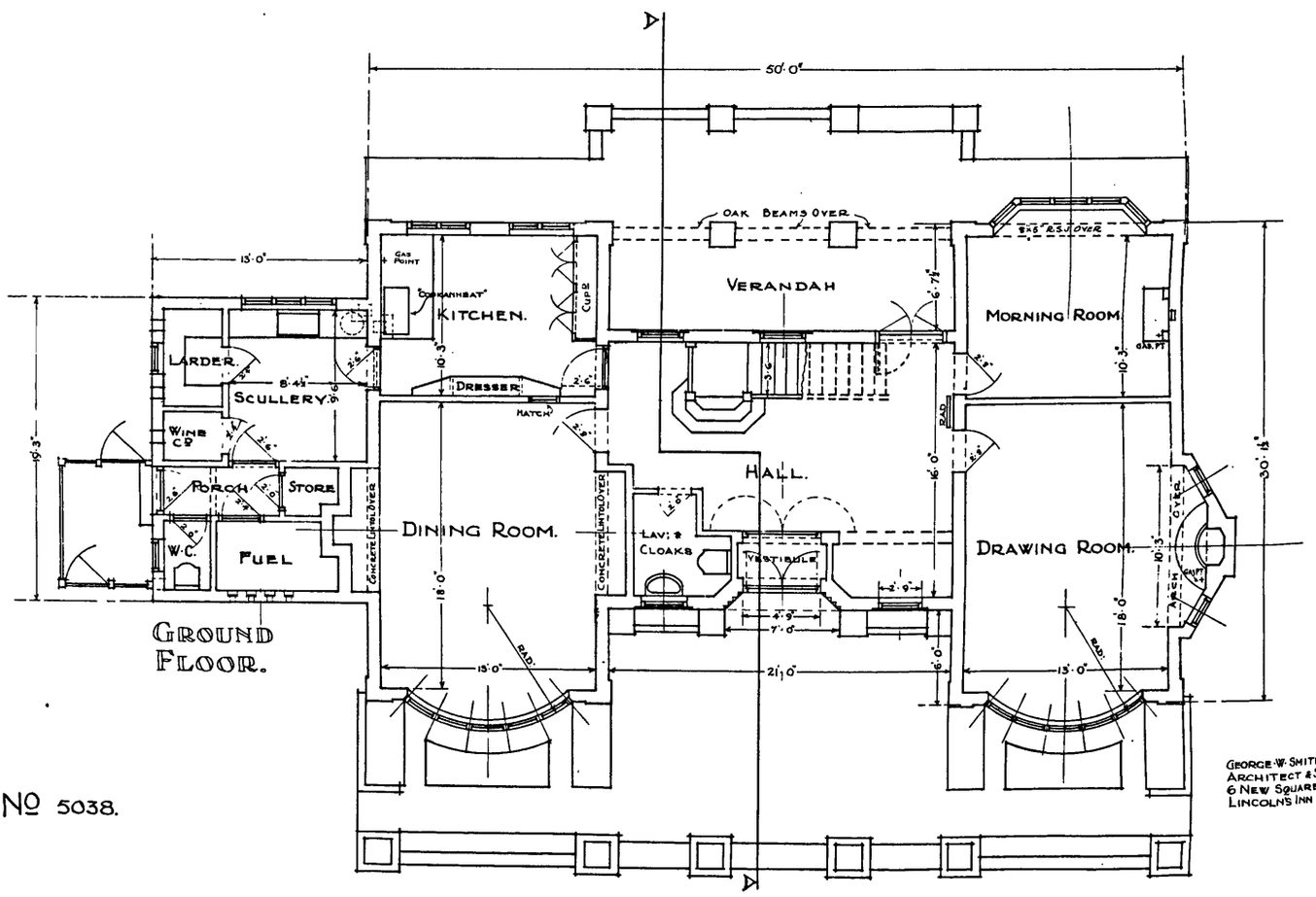
GEORGE W. SMITH, F.S.A., ARCHITECT.



FRONT ELEVATION.

GEORGE W. SMITH M.S.A. HISTORIC B
ARCHITECT & SURVEYOR
6 NEW SQUARE
LINCOLNS INN W.C.2.

No 5041



GROUND FLOOR.

No 5038.

GEORGE W. SMITH M.S.A.
ARCHITECT & SURVEYOR
6 NEW SQUARE
LINCOLNS INN W.C.2

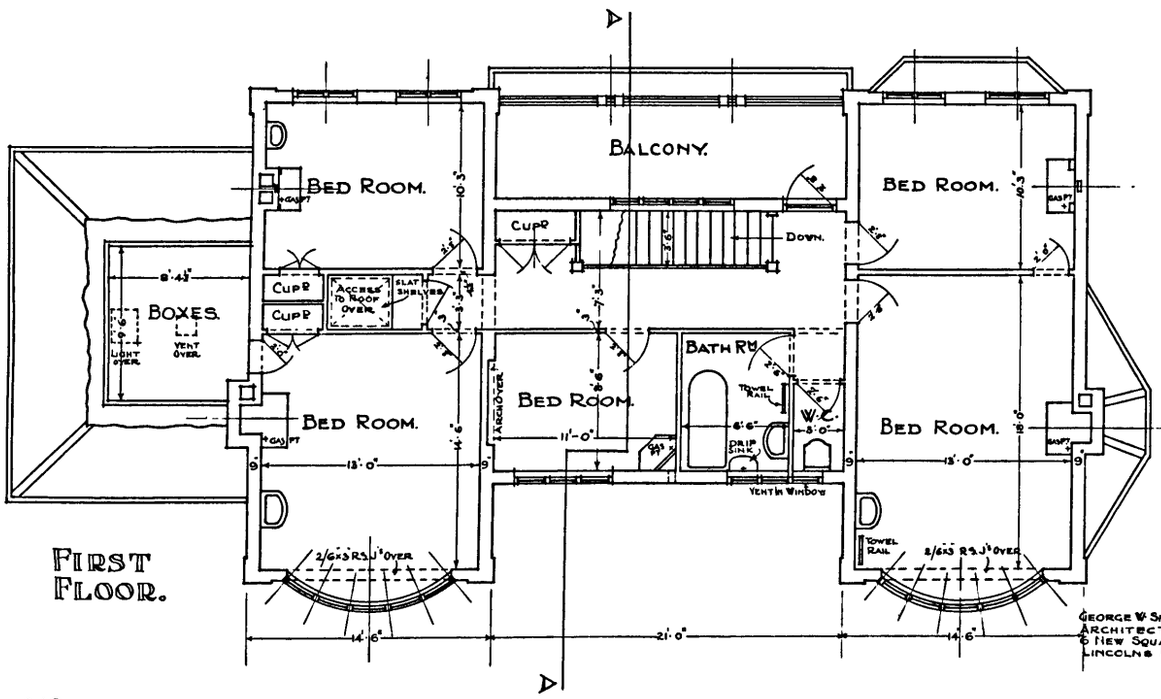
THE BRAMBLES, FIFE ROAD,

GEORGE W. SMITH

ELEVATION TO GARDEN.

GEORGE W. SMITH & SON (LATE OF 31 & 32 HIGH STREET, BLOOMSBURY)
ARCHITECT & SURVEYOR
6 NEW SQUARE
LINCOLN'S INN W.C.2.

NO 5040.



FIRST FLOOR.

GEORGE W. SMITH & SON (LATE OF 31 & 32 HIGH STREET, BLOOMSBURY)
ARCHITECT & SURVEYOR
6 NEW SQUARE
LINCOLN'S INN W.C.2

NO 5037.

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THE BRAMBLES. FIFE ROAD.E

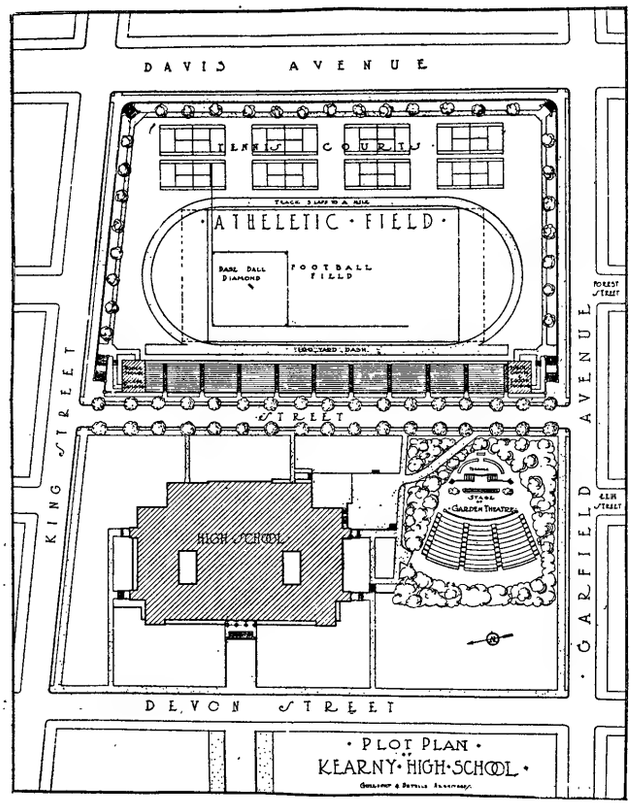
"INK-PHOTO" WM BROWN & CO. LTD. LONDON, E.C.3.

D, EAST SHEEN, LONDON, S.W.

"INK-PHOTO" WM BROWN & CO. LTD. LONDON, E.C.3.

THE BRAMBLES, FIFE ROAD, EAST SHEEN. LONDON, S.W.

GEORGE W. SMITH, F.S.A., ARCHITECT.



GUILBERT & BETELLE, ARCHITECTS

KEARNY HIGH SCHOOL, KEARNY, N.J.

opportunity of running through the building before you start work, and put down on paper the amount which you consider the dilapidations will come to, and when the measurements are taken, and the figures worked out, you will be able to check your own private figure. In a comparatively short time, if you keep in touch with the fluctuation of prices, you will be able to put down a figure which will correspond very closely with the result of the actual survey. You may be told to prepare particulars of sale of a town house, a country estate, an area of building land. In each case do not be content with just doing the work in hand, but at the same time form your own opinion as to its value. In valuing timber, estimate the contents of each tree before it is measured, and, if you have the opportunity, walk through a wood and estimate the value per acre and check it when the valuation is complete. The same applies to nearly everything we do. If a valuation is to be made of any kind of property, put down your own figure after seeing the property. If you carry out this simple plan on every possible occasion, in after years, when asked " How much will it cost to clean this field ? How much must I spend to put this house in a thorough state of repair ? "—and the hundred and one questions which all of us are expected to answer with approximate accuracy at a moment's notice—you will be able to supply answers which will not disgrace you, but which, when checked with estimates which are afterwards obtained, or with the actual cost of the works, will prove that you are capable and that your judgment can be relied upon.

Always, if it is in any way possible, see a job through. How often do we see a man who is told to do part of a job for which he has a special knowledge hand over his work when he has completed it, and never give a thought to the ultimate result. Such a man learns nothing, he has done the work which he knows and that is enough for him ; he is not going to be bothered with someone else's job. Why should he ? He has quite enough to do as it is. But the man who is determined to succeed—and it is only by determination that one can succeed (I should like to emphasise that as much as possible)—will find out the history of the whole job, and will, from time to time, enquire of his friend in the office, " How is so and so going on ; is it settled yet ? " and if he is a decent fellow as I must assume he is, he will be told all particulars and will have obtained an insight into work which is outside his actual sphere. In time what happens ? The principal wants to see the man in charge of the job ; he is away, but the matter is urgent, and on enquiring he is told that there is someone in who knows something about it, and our friend is called in and is able to bring his employer's knowledge up to date with results to himself which may be far-reaching.

There are two types of men who succeed in our profession, and I don't think our profession differs from others in that respect. The man who has a thorough knowledge of his business and whose success depends upon that knowledge, and the man who has less knowledge but who has manner which endears him to those whom he meets. Of course the man who has great knowledge and a good manner too will outstrip everybody, but we know that a good manner will carry a man through in spite of the fact that his knowledge is more limited. " Oh, I know Jinks is not a clever fellow, but he's a jolly nice chap to meet and he suits me " is a remark that I have heard more than once.

* * * * *

There is, perhaps, no profession which touches at so many points the interests of the public, both individual and collective, as that of the surveyor. The health of both town and country dwellers depends largely on their scientific knowledge of and regard for sanitation, lay-out, sewage disposal, water supply, and management of house property. Indeed, attention to these matters by well-qualified persons has been responsible for a reduction in the death rate to a degree almost equal to that attributable to medical knowledge and research. Upon their careful and experienced management of country estates the economic production of home-grown food and timber largely depends. The good relationship between owners and occupiers of all classes of property also depends to a great extent on the tact, capacity and foresight of the agent in charge ; and, also, the financial success or otherwise of the many and various transactions to which both urban and rural property are subject, and on which the well-being of both owners and occupiers so largely hangs.

Those of you who have had an opportunity of seeing the difference between an estate, whether urban or rural, managed by a qualified person and one managed by an unqualified person will have no hesitation in saying that the happiness and welfare of millions of people depend to a large extent upon the qualifications which we are at such pains to acquire.

Economic building, with which the possibility of letting houses and other premises at reasonable rents is intimately connected, depends to a large extent on the surveyor in respect of accurate and readily understood quantities, experienced supervision of the work in course of erection, and care and knowledge in dealing with builders' accounts on completion.

Finally, the security for mortgages, where trust money and shareholders' moneys are largely involved, depends upon the experience and foresight of the surveyor responsible for the valuation.

Our responsibility very rarely ends when we have satisfied our clients, for much of our work affects the whole community. A man may keep in perfect health and avoid a doctor, he may have perfect teeth and avoid a dentist, if he is extremely careful he may avoid the legal profession and the parson, but if he realised to what an extent his material welfare is dependent upon the work of surveyors he would see to it that none but qualified persons were employed.

BRISTOL.—The Corporation have made contracts for the erection of 96 houses at the Knowle site at a total cost of £39,630.

GOSPORT.—The Town Council are considering the purchase of land at a cost of £10,500 for a scheme for the development of Stokes Bay.—Plans passed : 5 houses, Grove Road, for Mr. W. G. Roberts ; 10 houses, Melvelle Road, for Mr. A. Monkton.

SHENLEY.—Herts Education Committee are to secure a 2 acre site between London Colney and Shenley for the erection of an elementary school.

List of Housing Schemes Sanctioned between June 19 and October 15, 1924

By the Ministry of Health under the Housing Acts of 1923 and 1924.

BEDFORDSHIRE.—Bedford, 50 P.E.; Luton, 100 P.E.; Eaton Socon, 20 P.E.

BERKSHIRE.—Reading, 50 P.E.; Maidenhead, 50 P.E.; Cookham, P.E. 6; Farringdon, P.E. 1; Wantage, P.E. 1.

BUCKINGHAMSHIRE.—Aylesbury, T.C. 64, P.E. 7; Chepping Wycombe, P.E. 50; Beaconsfield, P.E. 20; Bletchley, P.E. 20; Linslade, P.E. 9; Wolverton, P.E. 10; Eton, P.E. 49; Wycombe, P.E. 100.

CAMBRIDGESHIRE.—C.C. 2; Cambridge, T.C. 24, P.E. 15; Newmarket, U.D.C. 12; Caxton and Arrington, R.D.C. 4.

CHESHIRE.—Birkenhead, T.C. 193; Chester, P.E. 50; Wallasey, 25; Congleton, P.E. 32; Dukinfield, T.C. 20, P.E. 20; Alderley Edge, P.E. 5; Altrincham, P.E. 1; Bowdon, P.E. 5; Bredbury and Romilly, P.E. 30; Cheadle and Gatley, P.E. 100; Ellesmere Port and Whitley, U.D.C. 260; Hale, P.E. 8; Hazel Grove and Bramhall, P.E. 50; Hoylake and West Kerby, U.D.C., 12; Marple, P.E. 50; Runcorn, P.E. 28; Sale, P.E. 10; Winsford, P.E. 20; Bucklow, P.E. 22; Chester, P.E. 30; Runcorn, P.E. 100; Wirral, P.E. 25.

CORNWALL.—Fowey, P.E. 7; Launceston (Dunneheved), T.C. 10; Liskeard, P.E. 10; Truro, T.C. 8.

CUMBERLAND.—Carlisle, P.E. 70; Cockermouth, P.E. 11; Keswick, U.D.C. 6; Carlisle, P.E. 20.

DERBY.—Derby, P.E. 50; Chesterfield, T.C. 50; Alvaston and Boulton, U.D.C. 8; Belper, P.E. 13; Bolsover, U.D.C. 30; Brampton and Walton, P.E. 12; Clay Cross, P.E. 44; New Mills, P.E. 25; Wirksworth, P.E. 25; Repton, P.E. 25; Shardlow, P.E. 171; Sudbury, P.E. 2.

DEVON.—Exeter, P.E. 14; Plymouth, P.E. 50; Barnstaple, T.C. 15; Bideford, P.E. 14; Dartmouth, P.E.2; Gt. Torrington, P.E. 1; Honiton, T.C. 8, P.E. 10; Torquay, P.E. 3; Brixham, P.E. 11; Exmouth, P.E. 16; Newton Abbot, P.E. 4; Northam, P.E. 6; Axminster, P.E. 50; Crediton, P.E. 1; Holsworthy, P.E.1; Honiton, P.E. 30; Kingsbridge, P.E. 8; Newton Abbot, P.E. 40; St. Thomas, P.E. 15; South Molton, P.E. 1; Torrington, P.E. 1.

DORSET.—Blandford Forum, T.C. 4; Poole, P.E. 100; Shaftesbury, P.E. 1; Wareham, P.E. 16; Sherborne, U.D.C. 40; Swanage, P.E. 4; Cerne, P.E. 1; Poole, P.E. 75; Wareham and Purbeck, P.E. 6.

DURHAM.—Darlington, P.E. 5; S. Shields, P.E. 300; Sunderland, L.A. 22, P.E. 75; West Hartlepool, T.C. 100; Jarrow, P.E. 40; Stockton-on-Tees, T.C. 100; Bishop Auckland, P.E. 15; Blaydon, U.D.C. 46, P.E. 90; Chester-le-Street, U.D.C. 8; Hetton, P.E. 14; Houghton-le-Spring, U.D.C. 36; Leadgate, P.E. 70; Southwick-on-Wear, U.D.C. 60; Stanley, P.E. 30; Washington, P.E. 10; Willington, U.D.C. 30; Auckland, P.E. 7; Chester-le-Street, P.E. 1; Darlington, P.E. 30; Easington, P.E. 105; Lanchester, P.E. 12; Sedgefield, P.E. 8.

ESSEX.—East Ham, P.E. 394; Colchester, T.C. 12; Brentwood U.D.C. 10; Clacton, P.E. 1; Epping, P.E. 20; Loughton, P.E. 15; Romford, P.E. 100; Witham, U.D.C. 20; Belchamp, P.E. 5; Billericay, P.E. 100; Braintree, P.E. 30; Chelmsford, P.E. 60; Helstead, P.E. 20; Lexden and Winstree, R.D.C. 8; Orsett, R.D.C. 50, P.E. 50; Rockford, R.D.C. 80; Romford, P.E. 200; Saffron Walden, P.E. 10.

GLOUCESTER.—Bristol, T.C. 25, P.E. 25; Gloucester, T.C. 100, P.E. 25; Tewkesbury, T.C. 12; Charlton Kings, P.E. 1; Cirencester, P.E. 6; Newnham, P.E. 6; Cheltenham, P.E. 21; Cirencester, P.E. 21; Stow-on-the-Wold, P.E. 2; Tewkesbury, P.E. 6; Thornbury, P.E. 10; West Dean, P.E. 1.

HEREFORD.—Hereford, T.C. 22; Ledbury, P.E. 20.

HERTFORD.—Hertfordshire, C.C. 2; St. Albans, T.C. 12, P.E. 25; Cheshunt, P.E. 50; East Barnet Valley, P.E. 50; Stevenage, P.E. 5.

HUNTINGDONSHIRE.—St. Ives, P.E. 4.

ISLE OF ELY, C.C. 4; Chatteris, P.E. 20; March, P.E. 40.

COUNTY OF ISLE OF WHITE.—Newport, T.C. 4; St. Helens, P.E. 34.

KENT.—Kent, C.C., 8; Chatham, P.E., 50; Gillingham, P.E., 100; Gravesend, P.E., 100; Hythe, P.E., 14; Maidstone, T.C., 44; Sandwich, T.C., 4; Tenterdon, P.E., 6; Beckenham, P.E., 38; Bexley, P.E., 50; Cheriton, P.E., 35; Dartford, U.D.C., 44, P.E., 7; Herne Bay, U.D.C., 12; Milton Regis, P.E., 142; Northfleet, P.E., 20; Walmer, U.D.C., 12; Whitstable, P.E., 50; Bromley, R.D.C., 50; Dartford, P.E., 21; East Ashford, P.E., 20; Maidstone, P.E., 20; Sheppey, P.E., 20; Tenterden, P.E., 12; West Ashford, P.E., 12.

LANCASHIRE.—Bolton, T.C., 143, P.E., 153; Liverpool, T.C., 630, P.E., 1,000; St. Helens, T.C., 80; Chorley, T.C., 20; Clitheroe, P.E., 142; Atherton, P.E., 20; Chadderton, P.E., 50; Crompton, U.D.C., 28; Croston, P.E., 6; Denton, P.E., 11; Fleetwood, U.D.C., 81, P.E., 50; Golborne, U.D.C., 20; Letham and Burscough, U.D.C., 12; Leyland, U.D.C., 30; Littleborough, U.D.C., 16; Milnrow, P.E., 24; Newton-in-Makerfield, U.D.C., 50; Ormskirk, U.D.C., 20; Prestwich, P.E., 120; Radcliffe, P.E., 30; Rishton, P.E., 15; Standish-with-Langtree, P.E., 10; Stretford, U.D.C., 50; Thornton, P.E., 40; Tottington, P.E., 8; Turton, P.E., 50; Walton-le-Dale, U.D.C., 36; Waterloo-with-Seaforth, P.E., 162; Westhoughton, P.E., 20; Barton-upon-Irwell, P.E., 100; Clitheroe, P.E., 4; Garstang, P.E., 8; Lancaster, P.E., 1; Lunesdale, P.E., 4; Preston, P.E., 100; Warrington, P.E., 82.

LEICESTERSHIRE.—Leicester, T.C., 2,000; Ashby Woulds, P.E., 6; Melton Mowbray, P.E., 30; Oadby, P.E., 12; Quorndon, P.E., 4; Thurmaston, 30; Billesdon, P.E., 10; Hinckley, P.E., 2; Market Bosworth, P.E., 20; Market Harborough, P.E., 10.

LINCOLNSHIRE (PARTS OF HOLLAND).—Boston, T.C., 20; Spalding, P.E., 15; Sutton Bridge, P.E., 3; East Elloe, R.D.C., 22; Spalding, R.D.C., 4.

LINCOLN (PARTS OF KESTEVEN).—Bourne, U.D.C., 8, P.E., 12; Sleaford, R.D.C., 6, P.E., 6.

LINCOLN (PARTS OF LINDSEY).—C.C., 2; Grimsby, T.C., 2; Brigg, U.D.C., 34; Cleethorpes, P.E., 44; Gainsborough, U.D.C., 16, P.E., 2; Mablethorpe, P.E., 47; Scunthorpe, P.E., 50; Woodhall Spa, P.E., 5; Caister, P.E., 6; Glanford Brigg, P.E., 24; Horncastle, P.E., 5; Spilsby, P.E., 10.

LONDON.—London, C.C., 94; Bermondsey, T.C., 10; Greenwich, T.C., 12; Hackney, T.C., 48; Kensington, T.C., 40.

MIDDLESEX.—Ealing, P.E., 2; Hornsey, T.C., 100; Edmonton, U.D.C., 82; Enfield, U.D.C., 100, P.E. 100; Friern Barnet, U.D.C., 32; Hanwell, P.E., 50; Hendon, P.E., 50; Heston and Isleworth, P.E., 152; Ruislip-Northwood, U.D.C., 36, P.E., 45; Southall-Norwood, P.E., 138; Southgate, U.D.C., 12; Uxbridge, P.E., 30; Staines, P.E., 10.

MONMOUTHSHIRE.—Newport, P.E., 151; Abersychan, U.D.C., 20, P.E., 50; Bedwellty, P.E., 17; Blaenavon, P.E., 8; Chepstow, P.E.5; Panteg, P.E., 29; Saint Mellons, P.E., 30.

NORFOLK.—Norwich, T. C., 100; New Hunstanton, P.E. 1; Walsoken, P.E., 20; Depwade, R.D.C., 4, P.E., 20; Henstead, P.E., 20; St. Faith's, R.D.C., 6.

NORTHAMPTONSHIRE.—Northampton, P.E., 60; Desborough, P.E., 12; Kettering, P.E., 25; Rothwell, P.E., 10; Brackley, P.E., 6; Hardingstone, P.E., 5; Oundle, R.D.C., 2.

NORTHUMBERLAND.—Berwick-upon-Tweed, T.C., 40; Blyth, P.E., 51; Earsdon, U.D.C., 66, P.E., 21; Longbenton, P.E., 6; Newbiggin, P.E., 20; Newburn, U.D.C., 26, P.E., 25; Prudhoe, P.E., 10; Westlade, P.E., 16; Whitley and Monkseaton, P.E., 30; Alnwick, P.E., 4; Bellingham, P.E., 4; Castle Ward, P.E., 50; Haltwistle, P.E., 25; Morpeth, P.E., 50.

NOTTINGHAMSHIRE.—East Retford, P.E., 6; Mansfield, T.C., 75, P.E., 90; Arnold, U.D.C., 8; Beeston, U.D.C., 22; Carlton, P.E., 22; Huthwaite, P.E., 5; Kirkby-in-Ashfield, P.E., 1; Worksop, P.E., 50; Bingham, P.E., 50; Blyth and Cuckney, P.E., 50; Leake, P.E., 6; Skegby, P.E., 105; Southwell, P.E., 582.

OXFORDSHIRE.—Banbury, T.C., 30, P.E. 12; Crowmarsh, P.E., 6; Headington, P.E., 11; Witney, R.D.C., 20.

SHROPSHIRE.—Oswestry, P.E., 50; Shrewsbury, T.C., 46; Wenlock, T.C., 14, P.E., 10; Wellington, U.D.C., 12; Oswestry, P.E., 12; Wellington, P.E., 1.

SOKE OF PETERBOROUGH.—Peterborough, P.E., 35.

SOMERSETSHIRE.—Bath, P.E., 40; Glastonbury, P.E., 10; Clevedon, P.E., 15; Midsomer Norton, P.E., 9; Portishead, P.E., 3; Street, U.D.C., 10; Axbridge, P.E., 25; Chard, P.E., 10; Langport, P.E., 13; Shepton Mallet, P.E., 20; Taunton, P.E., 8; Wincanton, R.D.C., 39; Yeovil, P.E. 12.

SOUTHAMPTON.—Bournemouth, T.C., 62, P.E., 50; Portsmouth, P.E., 100; Southampton, P.E., 100; Gosport, P.E., 25; Alton, P.E., 5; Fareham, P.E., 6; Andover, P.E., 20; Droxford, P.E., 50; Fareham, P.E., 50; Hartley Wintney, P.E., 20; Lymington, P.E., 60.

STAFFORDSHIRE.—Burton-upon-Trent, P.E., 20; Stoke-on-Trent, P.E., 247; Wolverhampton, T.C., 140; Lichfield, T.C., 16, P.E., 5; Newcastle-under-Lyme, T.C., 120; Stafford, P.E., 50; Tamworth, P.E., 1; Amblecote, P.E., 12; Audley, P.E., 20; Brierley Hill, U.D.C., 40; Brownhills, U.D.C., 100, P.E.1; Cannock, U.D.C., 82; Coseley, P.E., 1; Leek, U.D.C., 10; Perry Barr, P.E., 90; Quarry Bank, P.E., 3; Rowley

Regis, P.E., 60; Rugeley, U.D.C., 30; Tipton, P.E., 20; Uttoxeter, P.E., 2; Wednesfield, U.D.C., 6; Cannock, R.D.C., 34, P.E., 26; Lichfield, P.E., 25; Seisdon, P.E., 1; Stafford, P.E., 21; Uttoxeter, P.E., 4; Walsall, P.E., 26.

SUFFOLK, EAST.—Ipswich, P.E., 150; Lowestoft, T.C., 4, P.E.25; Mutford and Lothingland, P.E., 11; Samford, P.E., 10.

SUFFOLK, WEST.—Bury St. Edmunds, T.C., 24; Brandon, R.D.C., 12.

SURREY.—Guildford, T.C., 20, P.E., 40; Kingston-upon-Thames, T.C., 40; Reigate, T.C., 6; Catherham, U.D.C., 26, P.E.11; Chertsey, P.E., 20; Dorking, P.E., 35; Farnham, P.E., 20; Frimley, P.E., 50; Haslemere, U.D.C., 10; Surbiton, P.E., 51; The Maldons and Coombe, P.E., 8; Woking, U.D.C., 12; Epsom, P.E.,50; Guildford, P.E., 30; Hambledon, P.E., 30.

SUSSEX, EAST.—Brighton, P.E., 25; Hastings, T.C., 18; Bexhill, T.C., 10; Hove, T.C., 186; Battle, P.E., 1; East Grinstead, P.E., 45; Newhaven, P.E., 10; Portslade-by-Sea, P.E., 7; Chailey, P.E., 6; Cuckfield, P.E., 30; Ticehurst, P.E., 30; Uckfield, P.E., 3.

SUSSEX, WEST.—Chichester, P.E., 10; Worthing, P.E., 40; Bognor, U.D.C., 25; Horsham, U.D.C., 16, P.E., 23; East Preston, P.E., 25; Horsham, R.D.C., 24; West Hampnett, P.E., 50.

WARWICKSHIRE.—Birmingham, T.C., 1,072, P.E., 600; Coventry, P.E., 200; Stratford-on-Avon, P.E., 25; Sutton Coldfield, P.E., 40; Warwick, P.E., 20; Kenilworth, U.D.C., 10; Foleshill, R.D.C., 30; Meriden, P.E., 60; Monk's Kirby, P.E., 50; Nuneaton, P.E., 51; Tamworth, P.E., 56.

WILTSHIRE.—Devizes, P.E., 31; Salisbury, T.C., 30, P.E., 10; Swindon, T.C., 30; Bradford-on-Avon, U.D.C., 6, P.E., 7; Trowbridge, U.D.C., 20, P.E., 16; Cricklade and Wootton Basset, P.E., 41; Warminster, P.E., 4; Westbury and Whorwellsdown, P.E., 2.

WORCESTERSHIRE.—Worcester, T.C., 4, P.E., 33; Bewdley, P.E., 18; Droitwich, T.C., 12; Stourbridge, P.E., 12; Malvern, P.E., 9; Oldbury, U.D.C., 40, P.E., 88; Stourport, U.D.C., 1; Rock, P.E., 7.

YORKSHIRE, EAST RIDING.—Kingston-upon-Hull, T.C., 55; P.E., 200; Collingham, P.E., 13; Hessle, P.E., 50; Hornsea, P.E., 1; Pocklington, P.E., 6; Withernsea, P.E., 100; Sculcoates, P.E., 20.

YORKSHIRE, NORTH RIDING.—Middlesbrough, T.C., 168; Redcar, T.C., 106, P.E., 25; Richmond, P.E., 21; Scarborough, P.E., 68; Eston, U.D.C., 50; Northallerton, U.D.C., 20; Guisborough, P.E., 2.

YORKSHIRE, WEST RIDING.—Bradford, T.C., 482, P.E., 6; Huddersfield, P.E., 30; Rotherham, P.E., 50; Sheffield, T.C., 382; Wakefield, P.E., 2; Doncaster, T.C., 454, P.E., 50; Harrogate, P.E., 25; Morley, T.C., 48; Pontefract, P.E., 80; Baildon, P.E., 20; Barkesland, P.E., 6; Barnoldswick, P.E., 1; Bentley-with-Arksey, U.D.C., 50, P.E., 100; Bingley, U.D.C., 12; Calverley, P.E., 30; Clayton West, P.E., 1; Darfield, P.E., 20; Dodworth, P.E., 10; Drighlington, P.E., 2; Earby, P.E., 10; Featherston, U.D.C., 100, P.E. 20; Garforth, P.E., 6; Holmfirth, P.E., 6; Knaresborough, P.E., 9; Meltham, U.D.C., 24; Mexborough, U.D.C., 40, P.E.,10; Mytholmroyd, P.E., 24; Otley, U.D.C., 52; Queensbury, P.E., 12; Rawdon, P.E., 25; Rawmarsh, U.D.C., 25; Royston, U.D.C., 4; Saddlesworth, U.D.C., 12; Skelmanthorpe, P.E., 12; South Crosland, U.D.C., 4; Soyland, P.E., 8; Springhead, P.E., 10; Thurstonland, P.E., 10; Worsborough, U.D.C., 16; Barnsley, P.E., 22; Goole, R.D.C., 14; Great Ouseburn, P.E., 20; Halifax, P.E., 12; Keighley, P.E., 3; Kiveton Park, R.D.C., 28; Penistone, P.E., 2; Skipton, P.E., 2; Thorne, R.D.C., 24; Wortley, R.D.C., 20.

BRECKNOCKSHIRE.—Brecknock, P.E., 3.

CARDIGAN.—Aberystwyth, P.E., 2; Cardigan, P.E., 9.

CARMARTHEN.—Burry Port, P.E., 30; Llandilo Fawr, P.E., 50; Llanelly, P.E., 30; Llanbyther, P.E., 5.

CARNARVON.—Glaslyn, P.E., 5.

DENBIGHSHIRE.—Denbigh, P.E., 4; Colwyn Bay and Colwyn, P.E., 7; Llangollen, P.E., 6; St. Asaph, P.E., 12; Wrexham, R.D.C., 24.

FLINTSHIRE.—Flint, P.E., 15; Holywell, P.E., 24.

GLAMORGAN.—Swansea, P.E., 200; Neath, P.E., 50; Bridgend, P.E., 6; Gelligaer, P.E., 8; Ogmore and Garw, P.E., 20; Penarth, U.D.C., 44; Pontypridd, P.E., 25; Cardiff, P.E., 50; Gower, P.E., 18; Penybont, P.E., 50; Pontardawe, R.D.C., 6.

MERIONETHSHIRE.—Dendraeth, P.E., 1; Dolgelly, P.E., 10; Penllyn, P.E., 2.

MONTGOMERYSHIRE.—Welshpool, P.E., 4; Newton and Llanllwchaiarn, U.D.C., 16; Llanfyllin, P.E., 10; Machynlleth, P.E., 1.

PEMBROKESHIRE.—Narberth, P.E., 1.

P.E., indicates Private Enterprise. U.D.C., Urban District Council. R.D.C., Rural District Council. T.C., Town Council. C.C., County Council. L.A., Local Authorities.

The Institution of Sanitary Engineers.

Annual Dinner.

The success of this Institution's Annual Dinner is always assured under the guidance of its well-known secretary, Mr. Paul N. Hasluck, and consequently it will be understood that the 1924 dinner was no exception. On the 5th inst. the Holborn Restaurant witnessed the gathering together, if not of the clans, at any rate of the clannish company, meeting to celebrate with dining and speechifying and music yet one more anniversary. Mr. J. S. Alford, M.Inst.C.E. (the president) and Mrs. Alford received the company of eighty to ninety, amongst whom were to be seen Major A. J. Martin (past president) and Mrs. Martin, Mr. T. J. Moss-Flower (past president) and Mrs. Moss-Flower, Mr. A. P. Cotterill (past president), Mr. J. H. Blizard (past president), Mrs. Cloudesley Brereton, Sir George Buchanan, C.B. (of the Ministry of Health), and the Rev. Dr. Stuart McGowan.

Very sensibly the speeches were restricted in number and were not of undue length. Major Martin, with his customary bonhomie, proposed the toast of "The Guests," coupling with it the name of Dr. Stuart McGowan; the proposer referred (à la Coué specifically) to the growth in health (year by year and session by session) of the institution of which they were so proud to be members, and in which they were delighted to welcome so many of the applicants for membership. He referred, too, to the Sanitary Conference which had been held during the so-called summer—at any rate in July (and he asked for emphasis to be laid on the second syllable of the month). And then, of course, he followed this up by noting the connection between the profession of Dr. McGowan and that of the Institution—that is to say,the association of cleanliness and godliness; he thought that the odour of sanctity so often heard of in connection with past centuries must frequently have been a very unsavoury odour.

Dr. McGowan followed in the same strain in a speech which met with a hearty reception. Major Martin had patted him on the back, and he proceeded to pat the Restaurant management on the back in turn, and also took up the burden of cleanliness and godliness in mutual correlation. He added, incidentally, that wherever he had travelled in Europe he found that English sanitary engineers have been employed for the provision of the sanitary arrangements—if not totally, at any rate very largely. And he had his little jokes to make about the humorous plumber and his genus.

Sir George Buchanan, proposing the health of the Institution, started by declaring that he did not intend to eulogise it, but all the same he clearly showed that he thinks highly of it; he, too, emphasised the fact that public health is at a loftier stage of development in our Empire than elsewhere, but he spoke a good word for the newly created States of Europe in their endeavours towards improvement, and with that object in view their delegates visited our shores and attended courses of lectures arranged for their behoof.

Finally, the president, in acknowledgment of Sir George's kind speech, complained that Major Martin had robbed him of the business remarks he had intended to make, and that Dr. McGowan had deprived him similarly of his proposed jokes; consequently he fell back upon sewage sludge and manures—a peculiarly inappropriate change from the really excellent provender which had been supplied at the dinner. He gave percentages of the decrease in the agricultural supply of pigs, sheep, cattle and horses, with the consequent diminution of food manures.

Competition News.

Barrow Hill Memorial Club Competition

Members and Licentiates of the Royal Institute of British Architects must not take part in the above competition because the conditions are not in accordance with the published Regulations of the Royal Institute for Architectural Competitions.

In connection with the proposed branch library on the Compton Road estate the Leeds Corporation Library Committee have decided to invite competitive designs in accordance with the R.I.B.A. conditions. Mr. Percy S. Worthington has been chosen as Assessor. The premiums are to be £35, £20 and £15.

Trade Recovered for Britain.

The General Electric Co., Ltd., has been advised that the South African Railways have accepted its tender for supplies of Osram lamps for the ensuing 12 months. It is the first time for some years that the bulk of this large and important contract has found its way to an English manufacturer. The contract was lost to this country some years ago, and has since been held by foreign firms. This success of the G.E.C. in recovering trade for Britain is all the more significant when it is realised that they have secured the contract in competition with the whole world.

Amalgamation and After.

By Mr. A. J. Taylor, President of the Society of Architects.

The election of a new President of the Society at the present juncture appears to have given the impression to some people that notwithstanding the forthcoming amalgamation of the Society with the Institute the Society is, as it were, taking a new lease of life. That is not so; it only means that so long as the Society continues its separate existence its ordinary procedure must continue and therefore I find myself by the wishes of the members occupying the highest position in which it is in their power to place me. The fact that my tenure of the office may automatically cease before very long on the dissolution of the Society does not detract from my appreciation of the honour which the members have conferred upon me or my desire and intention, like Mr. Britling, "to see it through." It is customary for the incoming President to present an address to the members and to give his views on matters affecting the profession in general and the Society in particular, but as I am rather in the position of the visitor who calls only to say "good bye" it would seem that my brief remarks might with propriety take the form of an inaugural and a valedictory address in one.

It is perhaps peculiarly fitting that at the present juncture both the Presidents of the Institute and of the Society are provincial architects, because it is in the provinces more particularly that the architect is called upon to contend with in a larger degree, perhaps, than obtains in the Metropolis those difficulties peculiar to the architect in the present unprotected state of the profession. So far as the Society is concerned it always has been and still is in essence a Society of provincial architects, with headquarters in London, because by far the larger proportion of its membership is composed of architects practising outside London, and it is because the Society has, from its inception, in season and out of season, championed the cause of Registration and other reforms that it has received so large a measure of support, not only within its own membership but outside it, and I believe it was the fact that the Society gained the confidence of the whole of the profession in its handling of the Registration question, which eventually led to the consolidation of professional opinion in favour of the principle involved, followed subsequently by the R.I.B.A. amalgamation agreement with the one object in view—viz., the accomplishment of the Society's chief aim—viz., Registration.

I do not know whether at the time I am delivering these few remarks I shall be able to say that the amalgamation has been legalised by the consent of the Privy Council to the R.I.B.A. new supplemental Charter and revised Bye-laws, but, in any case, it seems clear from a public reference to the subject by the President of the R.I.B.A. that it is only a question of time before the actual machinery of amalgamation will commence to function and that for all practical purposes the amalgamation has taken place. What we have to consider now is our future personal relations with the Institute to which we shall presently transfer ourselves and presumably whatever of our belongings are left after paying our liabilities. Although the Society as a separate entity will drop out of the race, it will, under the amalgamation scheme, hand on the torch to the Institute, which body, I am convinced from personal contact with its leading members, is genuinely desirous of carrying on the Society's educational work and scholarships, etc., and also is very much in earnest in proceeding with the Registration proposals, in connection with which a joint Registration Committee was formed immediately the agreement was settled. If I know anything of the members of the Society and their feelings in the matter generally, I can safely take the responsibility of assuring the Institute that it is our intention, individually and collectively, when we transfer to that body, to give it the same loyal and active support which we are giving to the Society. If we do this, then those who fear, and perhaps with reason, that after amalgamation progress in the direction of attempting Registration and other reforms will not proceed so rapidly as they would wish, will prove happily mistaken, or if there is any apparent lack of initiative in the new Institute, it will, I think, be due to the fact that the ex-members of the Society have not availed themselves of their corporate privileges in taking that active part in the work and government of the Institute which it will be within their power to do under the new supplemental Charter and revised Bye-laws.

I have referred to the possibility of the members of the Society on its dissolution taking with them their surplus property. The Council is now engaged on a scheme for the disposal of the Society's assets for the consideration of the general body of members, and I am merely expressing my personal view in anticipating that when the members are presently called upon under clause 8 of the Society's Memorandum of Association when the Society is dissolved, to give what property remains after payment of its liabilities to some institution having similar objects to those of the Society, they will have no wish to do otherwise than transfer it to the care of that body with which they are about to be amalgamated, and without in any way making a virtue of necessity, it may perhaps be pointed out that such a course would merely be transferring the members' possessions from one pocket to another, because as members of the Institute we shall retain our interest in its property and the way it is administered. On this point there is no doubt that the Society's premises would form an extremely valuable addition to the Institute's possessions for meeting its extended activities and needs after amalgamation and might well form the headquarters of the joint Registration Committee. In fact, for all practical purposes it seems to me there is a reasonable possibility that to all outward appearance there will be or need be very little change in the present arrangements, and that what will happen will be that the members of the Institute will have two addresses instead of one until such time as the Institute grows too large to be housed either in Conduit Street or Bedford Square, or both, and an entirely new headquarters of the architectural profession becomes necessary.

For myself, I feel somewhat fearful as to whether I can preside over the destinies of the Society in the way it should be done, particularly in view of my residence at some distance from headquarters, and it was only the knowledge that I shall have the personal support of every member of the Council and of the permanent officials, that gives me sufficient courage to accept the position. Whether my tenure of office be short or more protracted than now appears likely, the members of the Society can at least rely upon my doing my utmost to maintain its honourable traditions and to further its interests and through it those of the profession.

BILSTHORPE.—Preparations are being made for sinking a new colliery, which will entail the building of a large mining village, and the Notts County Education Committee have decided to provide an elementary school for 1,000 children.

MANCHESTER.—Messrs. J. W. Beaumont & Sons, architects, 24 Brazennose Street, Manchester, have submitted the final plans for the new extension of Messrs. Lewis's, Market Street, Manchester, which have been approved by the Improvements Committee of the Manchester City Council. The cost of the new building is estimated at £300,000 and involves the demolition of a large number of buildings in Fountain Street.—Messrs. Robert Carlyle & Co., Ltd., builders, Manchester, are carrying out the first contract. The estimated cost of the completed building is about £1,000,000.—Messrs. H. C. Law & Son are to carry out alterations and additions to their printing works at Rusholme Road and Boundary Street East.—Plans prepared by Mr. W. Canning, architect, 20 Cross Street, Manchester.—Messrs. A. Brocklehurst & Co., architects, 10 Norfolk Street, Manchester. The conversion of house into shop and house at 95 Shakespeare Street.—Messrs. Jones & Dalrymple, architect, 178 Oxford Road, Manchester.—Alterations at 45 to 47 Stockport Road, Ardwick Green. Mr. J. H. Woodhouse, architect, 43 School Lane, Heaton Chapel. Alterations and additions to premises, 662 Stockport Road, Longsight.

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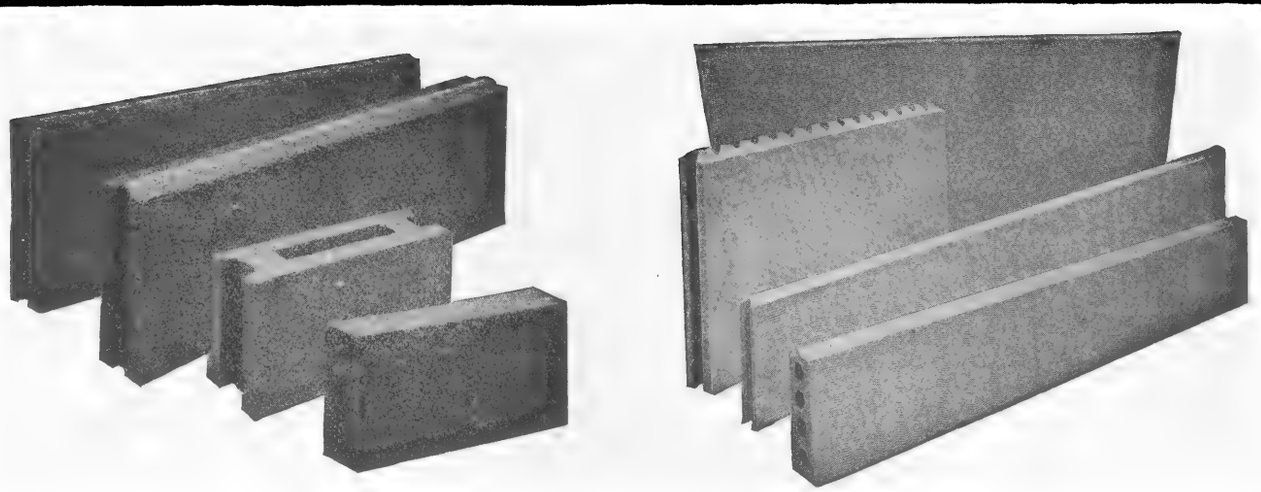

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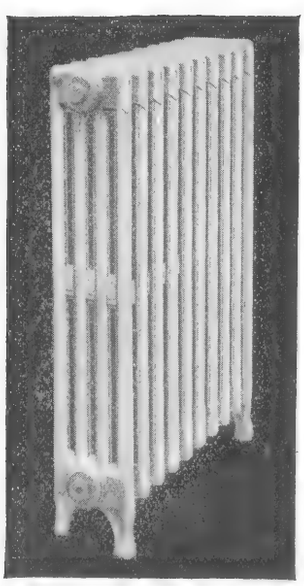

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Modern Town Growth.

Fourth Lecture by Professor William Haywood at the Birmingham University.

During the nineteenth century commercial and industrial towns in England lost that clear definition of form which is so apparent in ancient cities. The absence of need for military defence, and a rapid increase of industrialism, led to an irregular growth of towns, which in many cases extends far beyond the parliamentary boundaries.

Thus modern maps which represent cities as administrative areas only are apt to create a wrong impression of town planning problems; which should be independent of such arbitrary definition, because intimately connected with adjoining and even distant areas.

The discovery that parliamentary boroughs are merely sub-divisions of greater town belts or regions of mutual interest is responsible for the present enlargement of town planning action into regional planning, operated by the mutual agreement of local authorities.

Modern town growth in England is best seen in the latest density maps of the Royal Geographical Societies' Atlas, where a great part of Lancashire appears as practically one great town, of which Oldham, Wigan, Bolton, etc., are the producing centres, Manchester the market, and Liverpool the seaport. Glasgow is joining up with the Clyde ports and even reaching out towards Edinburgh. The Midlands, South Wales, South-West Yorkshire, and East Durham, all tend to merge their towns into town belts, which, it should be observed, are situated more or less upon the coal measures, to which they owe their position and development.

The housing evils of the nineteenth century were due to the ungoverned growth of towns, and were first checked by the powers which the Public Health Act of 1875 conferred on local authorities. Under recent town planning legislation the future entension of great cities will avoid the evils of the past.

The doctrine of Mr. Ebenezer Howard and others that great towns are necessarily evil, and so should be artificially limited in extent, has led to the building of self-contained garden cities of from 30,000 to 50,000 inhabitants, governed by a new policy of control, and as a variation of this idea, it is proposed to absorb the excess population of great cities by means of satellite towns, separated from the parent city by park belts, yet effectively associated with it by rapid transport services.

Municipal Recreation.

Fifth Town Planning Lecture.

An adequate provision for municipal recreation is not usually found in town planning schemes for English cities, but in the gardenless, tenemented areas of America, municipal responsibility for community recreation has been accepted for more than 30 years. No American town plan is thought complete without an allocation of recreation facilities within easy reach of all citizens; indeed, a carefully worked out "Park system" (upon which city recreation is based) is all the town plan many American cities possess.

In some respects the English need has been less than that of the United States. There are probably no towns in this country, for instance where it is necessary to prohibit traffic in certain streets during a part of each day, in order to make some provision—however inadequate—for children to play in safety near to their homes. We have comparatively few tenements; and little need for drastic action of this kind.

But the pressure is felt in other directions. With more leisure, our people now take their recreation more systematically. There is a great demand for special accommodation for the larger ball games, and in Birmingham within the last twenty years, 350 acres of land have been acquired and set apart for this purpose. During the same period the acreage of our suburban parks has been increased by over 600 acres, and all such parks are used almost to excess for cricket, tennis and bowls.

We have 475 acres at the Lickey Hills as a nature reservation for rambling, and the total area of land now available for public recreation in the City is no less than 2,566 acres.

We have made little progress, however, in two important aspects of American practice, *viz.*, the linking together of suburban parks by means of parkways; and the provision of neighbourhood centres and childrens' playgrounds. We have no parkways; but these, although important, are not urgent. Playgrounds in the built-up parts of the city were initiated by Mr. Norman Chamberlain before the war, but are now disorganised; and it is only within the last few years that a start has been made with neighbourhood centres in Birmingham. The outdoor appurtenances of a neighbourhood centre are in full use at Muntz Park; and it is hoped that indoor accommodation will be available at this centre before long. There are some prospects too, of a similar centre at the Henburys; and the need for a co-ordinated programme of recreation for the systematic equipment of the whole city, and especially of its congested central areas, is now under consideration. So that it may be said of Birmingham that it is definitely moving towards a wider policy in municipal recreation.

How to Write Books.

Conditions have perhaps changed more in matters relative to the production of educational and technical books during the last ten years than in a great many other branches of industrial activity. There is no indication to be seen that the pre-war conditions are likely to return in the near future. Before the war books with a small first edition could be produced and sold at a reasonable price, and show a fair return for the trouble and risks taken. But to-day the publisher is forced to calculate on an entirely different basis. In pre-war times a mental calculation of the chances of selling 1,000 copies of a book within a reasonable time was quite possible. Publishers were able by force of experience to judge the selling capacity of a great many propositions. Books that only touched lightly on a subject, but in no sense represented a well thought out survey, could be published with a small edition without any great risk, provided they were attractive. But to-day the cost of production have entirely changed, with the result that the publishers view proposed ventures from an entirely different angle. Every publication must incorporate material which will prove of real value for reference purposes for a generation or more. And such books can only be produced by earnest and careful study.

Naturally a purely technical book will only have a limited field, and it should therefore be so well thought out and comprehensive in character so as to secure a long life for itself as an authoritative standard text book. Only the very few venture to write and compile purely technical works, but many are attracted and endeavour to produce books which appeal to the architect's and public's artistic nature. And in this sphere the author should not venture unless his book includes a large amount of new data. The volume which merely goes over, and perhaps re-arranges in a somewhat better way material and facts that are well known cannot seriously expect a publisher to invest capital and time in its production. To base your hopes on the success of your work, which may be well written, but is only supported by indifferent photographs or drawings, is to ask for disappointments. The world to-day has a far greater appreciation for good illustrations than was the case thirty years ago. The art lover, architect, and student seek to make their own discoveries in the illustrations included in books. It is almost impossible to overdo the attention to details. Vague generalities in the descriptive letterpress are not appreciated. And whilst a general view illustrating a building or object should be included, a number of close-up photographs giving the interesting points of detail should undoubtedly be illustrated. These can still be augmented by working drawings showing the construction. There is character and individuality in everything that is worth while illustrating, and these points should be clearly emphasised. The art lover will seek to apply those features that charm his senses in the decorations of his own rooms; the architect will seek to incorporate in his work some ideas that have been suggested, and the student will learn and treasure up the methods and mannerisms that your illustrations have so clearly exposed and brought to light. Thus each will in turn appreciate and value the thought and care the author has taken to please them. Whatever subject the writer may select, it should be borne in mind that nothing short of an all time devotion to the same during the time of compilation will be productive of anything that could claim lasting attention.

STRETFORD.—Plans passed by U.D.C.: 4 shops, Moss Road, for Mr. J. Maunders; 4 shops, King Street, for Messrs. Howard & Son; extension of Avondale Road, for Trafford estates; extension of works, Warwick Road, for Messrs. Glover & Co., Ltd.; jam factory extension, Ayres Road, for Messrs. F. & T. Oldfield, Ltd.; works extension, Westinghouse Road, for Southern Oil Co., Ltd.

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Housing.

Mr. B. S. Townroe has written a most excellent book on Housing* which in the small space of 174 pages seems to us to contain all that need be said on the subject. He has succeeded in writing a book which is neither optimistic nor pessimistic, and it would be impossible for anyone to discover in its pages any bias for any policy and any disposition to dogmatise. He has made free use of the contributions of others, who include Dr. Addison, Sir Alfred Mond, Sir Arthur Boscawen, and Sir William Joynson-Hicks, while on the subject of construction and materials he has obtained contributions from Mr. H. O. Weller, the late Director of Building Research, Mr. S. B. Russell, and others who have been officially connected with the Ministry of Health on the technical side. Sir Charles Ruthen has written a retrospect on the question which is well put together. Mr. B. S. Townroe, who was formerly editor of "Housing," the organ of the Ministry of Health, and was also controller of the Housing Bonds campaign, is in an excellent position for taking an all-round view of the subject, while he is not hampered by the shackles which weigh on those who look on the subject from a purely technical standpoint, or those who are themselves engaged in the technical side of the problem of housing.

The experiences of the past ten years convince most of those who have given thought to the matter that we cannot expect from any policy an immediate panacea for our ills, and also that we have passed the stage when we can deal with this matter from the standpoint of *a priori* theory. Whatever original mistakes have been made, we have gone too far to turn back and if we have strayed away from the right path we can best regain it by joining it at some farther point rather than by retracing our steps. Every party in the State is committed to the continuance of a certain amount of State assistance; the only questions which remain are what form that assistance shall take and what are the nature of the impediments which stand in our way.

Mr. Townroe is able to show by references to past politics that it is the Conservative party rather than any other which has made housing a national issue, and that the Liberal and Labour parties have largely borrowed from their political rivals—out-Heroding their moderate proposals. Opposition to tentative measures dealing with housing has come from Mr. Wedgwood Benn, John Burns and others belonging to "advanced" shades of political thought, so that it might almost be said that the Conservative party are responsible for raising a question they now find difficult to control.

The causes of our difficulties are numerous, but not the least seems to be the extent to which many rely upon State help. If we are right, the obvious course—assuming State help is to be continued—is to limit it as much as possible to helping those who are ready to help themselves by taking up the responsibilities of ownership. In this the Conservative and Labour policies are sharply contrasted, Mr. Wheatley's measure discouraging the owner occupier and Mr. Neville Chamberlain's measure being designed to give him facilities.

We believe that, assuming subsidies are to be given the subsidy paid to those who will build for themselves should be greater than those given in other cases, while facilities should be given to borrow money at cheap rates. We believe it to be easier to end the difficulty by helping those who require the smallest inducement to become owners, leaving the houses they vacate for those who will only rent instead of building, for the most difficult class, those whose means or inclination prevent their taking a step towards independence. The end gained is the same, the provision of more housing, but the addition is made at the top of the scale and not at the bottom. If a man owns his own house the State and the community do not have to pay for supervision and maintenance and the account is closed. Further, we are helping the most useful and necessary classes of workers in the community rather than those who are on the edge of perennial difficulties. Again, if a man entirely independently or through a building society houses himself, the community to which he belongs frees itself from most of the expenses of administration, and this relief is a relief to the community to which he belongs.

Mr. Townroe emphasises the difficulties caused by a shortage of labour in the building trades and by deficient output on the part of labour, and it is difficult to see how these can be effectively remedied. We cannot conscript labour for the building trades any more than we can for farming, and the most that any Government can do to control the situation would be to pass an Act preventing the unions from spending trade union funds for political purposes, unless specially given for that end, and making peaceful picketing and sympathetic strikes illegal. We do not know whether any Government has the courage to act in this manner, but if they did it would very largely alter the position of things. We are told that many of the master builders are disinclined to take the full quota of apprentices they are entitled to, and if this is the case such selfish individual action is against public interests.

According to Mr. Townroe and those whom he quotes, the Ministry of Health do not appear to think that very much has been effected in cheapening building by the use of newer methods and materials; and Mr. H. O. Weller appears to be too sweeping when he brushes aside the possibilities of using unskilled labour, but he is certainly correct in emphasising the fact that forms of concrete constructions depend largely for their efficiency on the manner in which the concrete is made and used. It is also possible that the employment of the unskilled may not, despite cheaper rates, be a real economy on account of the factor of output.

Mr. Townroe rightly emphasises the importance of a continuity of policy. It is utterly impossible if Acts

* "A Handbook of Housing; How to meet the Problem." By B. S. Townroe, B.A. Methuen & Co. 6s. net.

of varying trends dealing with the same subject are passed and abandoned within a year of two to find out whether their operation will lead to good results, but we may take it that Mr. Wheatley's Act, like that of Dr. Addison, would be self-slain in operation, because both are beyond the capacity of the building industry. Sir Alfred Mond's policy of cutting down demands and limiting schemes quickly brought down building costs, while Mr. Neville Chamberlain's Act was productive of good results. Both show that greater progress can be made with comparatively moderate measures than with more ambitious ones, and it is therefore to be hoped that the Ministry of Health will rather check than encourage housing, while at the same time giving liberal aid to people who are ready to do something to meet their own wants. No State can disregard the possible danger of providing at great cost a huge mass of rented houses, the occupants of which might conceivably bring about national strikes for reductions of rent.

If housing stood independently of other necessities of life we might be justified in building at the national cost, but it is only one item of a very much bigger question—the difficulty which large numbers of the population meet with in attempting to earn sufficient wages to meet their wants, a difficulty which we have to meet now and in the future and on which our whole national prosperity depends.

Our Illustrations.

PROPOSED HOTEL, WOODHALL SPA. STOCKDALE, HARRISON & SONS, Architects.

Notes and Comments.

A Roman City in Tripoli.

It is stated that a great Roman city has been found beneath the sands of Tripoli. Indications were discovered just before the war which prevented the prosecution of excavation, but now the Italian Government have fitted out an expedition to excavate the ruins. The city, which we gather was called Lepta Magna, once accommodated 300,000 inhabitants, and though miles from the sea coast now was formerly a port from which corn was exported to Rome. It is anticipated that the city will prove to be of far greater interest than Herculaneum and Pompeii, while the sands have at once preserved it as efficiently as larvæ and ashes have preserved Herculaneum and Pompeii, and their removal is an easier task.

It is not known to what cause the abandonment of this great city was due, but it seems clear that a discovery of first-class importance has been made.

The Rise of Prices of Housing.

From the reports of local authorities it appears that they are not disposed to avail themselves of the larger subsidy granted under Mr. Wheatley's Act. Only three out of 1,388 authorities have decided to transfer their proposals from the Chamberlain to the Wheatley scheme to qualify for the bigger subsidy. It is stated that they object to the complicated conditions imposed under the last measure. Up to the middle of the last month 3,444 houses were authorised under the recent Act. The rise in the average cost of a non-parlour house from £384 in January to £438 in September and for that of a parlour house from £445 in January to £502 in September is a very serious sign and one which, we believe, indicates the danger of proposing great schemes. The cutting down of programmes would probably result now as it did during Sir Alfred Mond's tenure of office in a fall in prices, and it is to be hoped that the new administration will take immediate steps to secure this result.

Educational Schemes for Railway Workers.

Cinematograph lectures are to be included in the educational scheme arranged for their staff by the London Midland and Scottish Railway, and it is proposed in this way to illustrate various aspects of railway work. From the films, for instance, it will be possible for a man to follow the construction of a wagon from the rough timber and steel, or to study the intricacies of a locomotive. Training of the staff now forms an important branch of the company's welfare scheme. Comprehensive arrangements have been made for the coming winter, and the syllabus issued deals with some 150 subjects, which, in addition to covering every branch of railway knowledge, includes French, German, economic geography and English literature. At the school of signalling students have the opportunity of studying from a large model railway worked by electricity. Classes are to be held at more than 50 centres throughout England, Scotland, Wales and Ireland, and arrangements for lectures have also been made with various local education authorities, the L.C.C., the London School of Economics and the University of Manchester.

Australia's Example.

The President of the Federation of Master Builders of Australasia has described the manner in which a shortage of building trade operatives was overcome in that country.

Early in 1923 classes for training unemployed and unskilled men in bricklaying was started, and after a three months' course many of them had passed a test of laying 1,000 bricks on straight work in an eight-hours day. This year classes for plasterers have been started with even greater success, especially at the age of 25. The trade unions at first opposed, refusing to allow their members to work with those undergoing training, but, seeing that the Federation's intention was to supply a demand and not to flood the labour market, they withdrew opposition, to everyone's benefit. This should tend to show that similar steps might be taken here, as Labour is relatively an even stronger element in Australia than it is here.

A Caterham Experiment.

The Caterham Urban District Council are carrying out an admirable experiment in housing. Five-roomed semi-detached parlour houses are being built, the freehold price of which is £480. Applicants pay £40 deposit and 15s. 6d. a week, which includes 2s. 10d. rates and a premium on a £440 life endowment policy. The effect of which is that if the purchaser dies immediately after concluding the arrangement the house becomes the unencumbered property of his family. Sixty-four houses are occupied or in process of completion and 28 more are to be built. The sums mentioned buy the house in 20 years. Such a plan has obvious advantages, and is on lines with what might well be carried out extensively in most districts in the country to the great relief of many, both from the standpoint of comfort and of finance.

Manchester Art Gallery Competition.

Attention has been drawn to the fact that the date for returning the drawings in the above competition is repeatedly stated in the Press as January 20, 1925, whereas the revised date is now February 28, 1925. We have been asked to bring the above to the attention of our readers. Competitors will probably be glad to avail themselves of the extended time.

Mr. Hope Bagenal's Paper.

We shall give next week illustrations of the diagrams which Mr. Bagenal showed in his useful paper on Acoustics, which we have not space for this week, together with a résumé of the points to which he referred.

CAFE VERREY, REGENT STREET. Messrs. Yates, Cook & Darbyshire, Architects.

New Shops and Offices in Regent Street.

Many varied opinions have been expressed in connection with the rebuilding of Regent Street. The artistic have regretted the disappearance of Nash's classic elevations. The architectural profession have chafed at the restrictions. But very few adverse remarks have been heard from the clients; they seem to be delighted with the great improvements. The general public also who use the street as a shopping centre can every day be heard to express their pleasure at the improved facilities. From a purely business point of view it would appear that the principal individuals concerned were pleased with the change.

The Café Verrey illustrated forms part of the buildings at the corner of Hanover and Regent Streets, designed by Messrs. Yates, Cook and Darbyshire, architects, who are also responsible for a great number of the new buildings in Regent Street. The complete structure is supported entirely by a steel framework. This consists of massive stanchions carrying heavy steel compound girders, these having been designed to be of ample strength to carry the heaviest floor loads that are likely to be imposed and to fulfil the requirements of the London County Council. All the structural steelwork was designed, manufactured and erected by Messrs. John Booth & Sons, Hulton Steelworks, Bolton, to whom the work was entrusted by Messrs. D. G. Somerville & Co., Ltd., the general contractors.

Book Notes

Art Work Number Two, 1924.

We reviewed Part One three months ago and were not altogether favourably impressed. Part Two is devoted almost entirely to the modern school of thought and expression which is rather unfair and one-sided, and whilst those who are engrossed and self-centred devotees to this school fancy that all the former methods of painting are to be dismissed as past and unspeakably bad. The general public fortunately for some of us does not take kindly to modernism or futurism. Cedric Morris reminds one most of some of the artists that contributed to a well-known comic German weekly. The two illustrations on page 70 do not flatter the masculine race. Some will consider this an out-of-date and Victorian criticism. But many of us could probably recall sketches made at the age of seventeen which are almost as badly drawn as these illustrated. In those days the main idea was to express a certain satirical humour, and one was quite pleased with such efforts. Eyes and other facial details were drawn with as few lines as possible. Friends called these efforts, even in those far off days, clever. To-day we are glad that we have forgotten how to produce freaks and recognise that correctness in drawing is essential for the production of any work of art that is to be a lasting pleasure to the community.

There is much that is charming in "Rosemary" by Robert Bevan, and "The Farm," by Francis Unwin. In the former the effect is somewhat spoilt by angular details and lines.

E. McKnight Kauffer aroused our displeasure in Part One, the illustration on page 72 in no sense lessens our aversion to this painter's work.

"The God in the Car," by Wyndham Lewis is an unfinished sketch—the artist, who has produced sound and really good serious work—has rambled on a piece of paper and the world being what it is, has thought it worth publishing.

"At the Gate End. Plate," by George Bissell, reminds us of the Coal Mine at Wembley. One seem to recognise the crude figures as intended for human beings though one would be sorry to resemble them in any way. "Saturday Afternoon," by Sidney Hunt, might be any afternoon or morning for that matter. "Adam and Eve," by Alan Durst, is really comical, but why the realistic cat and very conventionalised dog? Mr. Kineton Parkes gives some of his impressions of Mr. Durst's work. We are inclined to believe what this writer says when he describes Mr. Durst as an authentic modern representative of the primitive artist. But because a man or woman ignores the use of a pencil and paper and uses a cutting tool is not to infer that he or she does not draw or map out their compositions. We would suggest to Mr. Parkes that it is quite possible to scratch.

One reads a lot about archaic in these times, it seems to classify all those who express their artistic feelings in a crude and primitive way. Civilisation has to be thrown on one side and naked realism clothed in a primitive conventionalisation, which, in the real primitive times, was not an intentional effort, but the outcome of a lack of knowledge. One knows and appreciates Richard Garbe's work and cannot think that Alan Durst has realised the greatness of his master's mind.

No. 223 REGENT STREET. Messrs. YATES, COOK & DARBYSHIRE, Architects.

We appreciate the furniture illustrated on pages 85 and 86, and willingly recognise as being really good. No effort has been made to obtain any effect that is not part of the useful purpose of the designs.

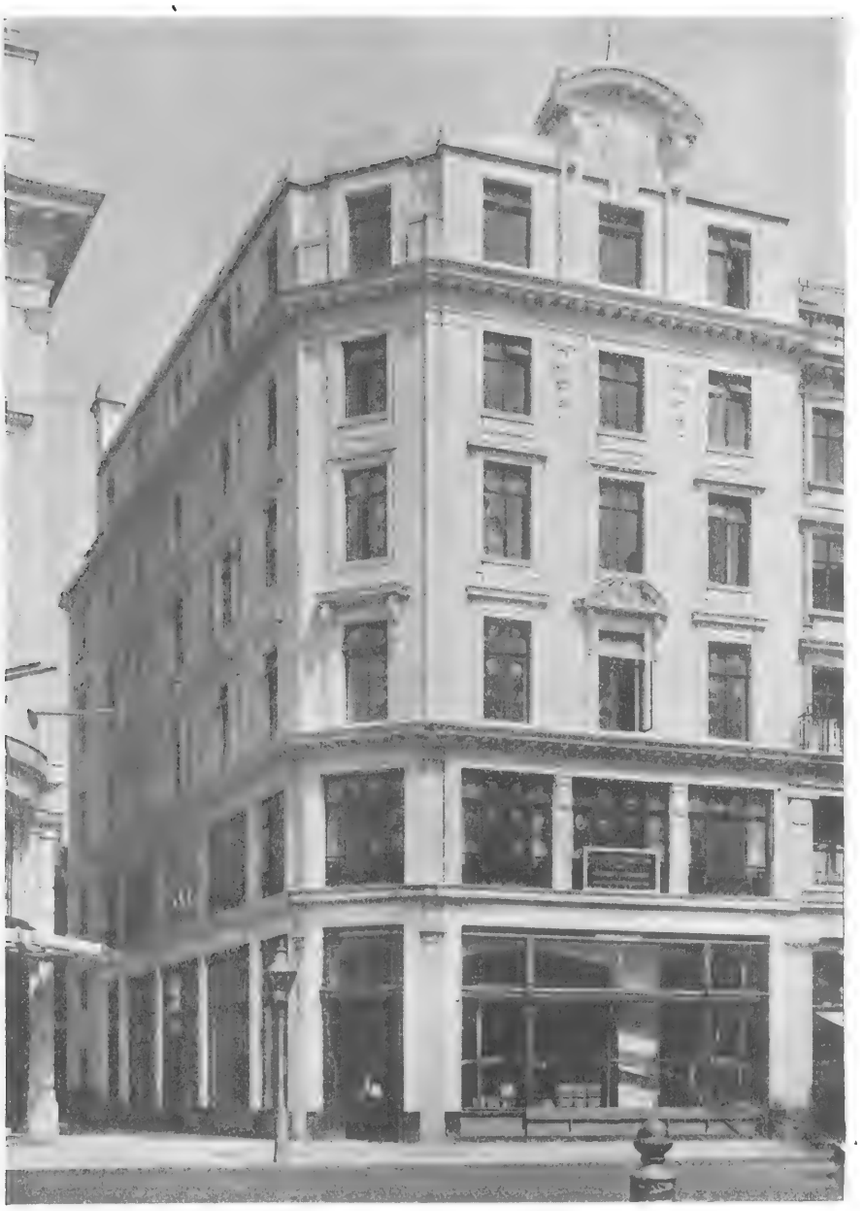
"Iris Tree," by Jacob Epstein. We do not as a rule admire this sculptor's work, but this bust is perhaps the best piece of work we have seen.

Mateo Hernandez, sculptor, described and lauded to the skies as one of the greatest by Amelia Defries on pages 98, 99, 100 and 101, has considerable talent we do not deny, but Miss Defries goes a great deal too far in our opinion in many of her statements. we wonder how she would write about some artist or sculptor she might discover in a year or two's time whose work she might like better. She would be obliged to create a new language wherewith to voice her feelings.

"After Sir Christopher Wren," by Charles Demuth, in what exact sense this drawing is after the great architect we are unable to discover: being a modern drawing it has certainly been created after the period in which Sir Christopher lived, but it might with equal truth be described as after the destruction of Pompeii.

Two Valuable London Sites.

We would call the attention of our readers to two very important central London properties which have appeared in our advertising columns. Freehold office buildings Nos. 20 and 21 Hart Street, Bloomsbury, W.C., occupying a corner position on Hart Street, 48 feet 6 inches frontage, and Barter Street, about 86 feet 6 inches. Possession can be obtained in 1925. The buildings are in good condition, but the site would lend itself to the erection of a fine addition to the architecture of the district, and an up-to-date building in such a position would be a profitable undertaking. Another fine corner position is that known as 137-8 High Holborn, and No. 12 Silver Street, W.C., possession in March next. Both of these very valuable properties were to be offered at auction by Messrs. Hillier Parker, May & Rowden yesterday afternoon, but as by that time this journal is being printed, it is impossible for us to announce whether they have been sold; if not, application to the auctioneers at their offices, 27 Maddox Street, W.1, would be well worth while to anyone interested in obtaining a really good site in these important West-end districts.



MESSRS. FULLER'S NEW PREMISES, REGENT STREET. MESSRS. COLLCUTT & HAMP, Architects.

Art Galleries.

The Graham Gallery, 72 New Bond Street. Here may be seen a number of water colour drawings by Donald Maxwell. The majority have been reproduced in his book on Wembley, which we reviewed some time ago. Those who were delighted with his book might care to possess one or two of the originals. They certainly are far and away superior to the reproductions. For example, No. 30, A Glimpse of Nigeria, is a very good case in point. All the refinement of the original now on view at the above exhibition has been lost in the reproduction; the sky is a deep blue, the buildings are not a meaty pink; the original is full of beauty and charming tone contrasts. The Gate of India, No. 10, has been purchased by Her Majesty the Queen, and without any doubt it is perhaps the best of the collection, though some might prefer No. 28, Canada over the Water.

An exhibition of water-colours by Romilly Feddon, at Messrs. Walker's galleries, 118 New Bond Street, W., should not be missed by those who are truly interested. There are only fifty-nine pictures, but one and all have a charm quite original and pleasing. We do not recollect ever having seen the media expressed in a like manner. One might imagine the artist saturating the paper to such an extent as to render it almost like wet blotting paper before applying his tones, which blend and harmonise in a very remarkable manner. Later on we are inclined to think that Mr. Feddon paints in his detail with a very dry brush; by this means we have before us beautiful graduated tones expressing sea, skies, and landscapes. Though none of the pictures are in any way woolly, the architectural details are well drawn in every instance. The sunlight effects are quite exceptional in brilliancy, specially considering the methods employed. No. 3, The Port of Cette, has been purchased for presentation to the Victoria and Albert Museum. The picture is certainly one of the best of a very good collection and will worthily represent the artist. No. 12, Through the Olive Trees, Mentone; No. 18, Mentone; No. 36, The Flower Market, Ventimiglia; No. 37, Mentone—Sunlight; No. 38, Bordighera—Evening, are, in our opinion, water-colours of a very high merit. The prices, considering the quality, are exceptionally low.

The Gieves Art Gallery, 22 Old Bond Street, W.1. An exhibition of landscapes depicting views from South Africa, India, China, Japan, Spain, Sicily, etc., by Edith Struben. The range of subjects is naturally a large one in view of the number of countries visited by the artist. No. 1, Snow on the Drakenstein Lekkerwyn, we can easily place first from a point of merit; the colouring is rich and the beautiful purple shadows of the mountain harmonise well with the deep blue sky. The typical South African farm nestling amongst a cluster of lovely brown

MESSRS. HANAN & SON, 203 REGENT STREET. MESSRS. YATES, COOK & DARBYSHIRE, Architects.

trees complete a very charming picture. It is rather a pity that this gem has been placed first on the catalogue. The exhibition as a whole is well worth a visit, though the standard of No. 1 is only on very few occasions illustrated in the other paintings.

In matters relative to architectural subjects the artist is not at home, the buildings lack substance and the details have been too vaguely suggested. No. 14, The Castle Courtyard. We are ready to admit that the portico would be very difficult to draw, but as rendered by the artist it is more like a thing alive than a piece of masonry with iron railings. Such architectural details should be taken very seriously. Montagu Pass, Cape Colony. We should like to see this sketch carried much further; at present it is very flat, but a very fine picture could be developed. The mountains need to be put back and the bridge given a little more attention in matters of detail; it would then contrast much better with the surrounding foliage.

Ida's Valley, Stellenbosch. This is a clever painting—indeed, the colour contrast have been handled in a masterly fashion. The grey-brown shadows on the white house are very effective and truthful.

An Old Dutch Home, Swellendam-Cape, is in complete contrast with the previous picture; the drawing is poor and the technique too much alike all over the picture to render any single detail in an effective manner.

Government House Garden, Pretoria. The perspective is rather faulty, otherwise the picture is quite pleasing.

Driekop Gorge, Transvaal. This sketch could also be made into a good picture, at present we are unable to concentrate our vision on any definite portion. If the details on the right of the picture were not so strongly expressed but toned down with a wash the whole effect would be far more pleasing.

Arcadia, Johannesburg. This is a pleasing picture; the flowers in the foreground have been well suggested. A slightly bluer sky would have better carried the weight of colour in the foreground.

The Artist's Home. In this picture the artist has made a mistake which is often made. The mid-distance detail is clearer and more defined than that of the foreground. We feel that the terrace garden should have been carefully rendered; this treatment would not have detracted from the house or the mountain in the background. It appears as if the artist were only interested in the house and had forgotten that most people see that which is nearest best. On the whole we may repeat that the show is well worth a visit, and those interested in South Africa will undoubtedly find many views which will remind them of old associations.

Competition News.

War Memorial, King Henry VIII School, Coventry.

Designs are invited for a Wall Tablet to be placed in the Large Hall of the above School. The designs will be assessed by an Assessor appointed by the President of the R.I.B.A., and must be submitted on or before the last day of December, 1924.

For further particulars apply to the Headmaster, King Henry VIII School, Coventry.

Argentina: Architectural Design Competition.

The Argentine Government offer prizes of 10,000, 6,000, 4,000, 3,000 and 2,000 Argentine gold pesos for the best architectural designs for a National Institute for the Blind.

Further particulars are available in the Enquiry Room at the Department of Overseas Trade, 35 Old Queen Street, Westminster, S.W.1.

We have referred elsewhere to the corrected date for sending in designs for the Manchester Art Gallery—viz., February 28, not January 20.

Contracts for 250 tube wagons have just been placed by the London Midland and Scottish Railway with the following firms:

Metropolitan Carriage & Wagon Co. Ltd. ..	100
Midland Rly. Carriage & Wagon Co., Ltd. ..	50
Hurst Nelson & Co., Ltd.	100

The wagons, which are to have steel underframes and wood-lined tops, will be 27 feet in length and of 20-ton capacity. The new stock is intended for use in Scotland for the conveyance of tubes, bar iron, etc.

Master Richard Quyny.

By Katharine A. Esdaile.

"Master Richard Quyny, Bailiff of Stratford-upon-Avon and Friend of William Shakespeare," * is not at first sight a title to attract a student of housing and of municipal activities; yet the information it contains throws new light not upon Stratford only, but upon these subjects in general. The effects of fire in the sixteenth century were so familiar that relief from national burdens was often granted to the afflicted town by the National Exchequer. When fire insurance had not been invented, a scheme of mutual relief was devised to take its place; and, best of all, Shakespeare himself is now shown to have been an architect. Let us see how and why such things are known.

We begin with the Fire Order issued by the Town Council in 1582, by which every Alderman was commanded to provide two leather buckets and every Principal Burgess one, "for a defence against fire"; and on May 7, 1585, all the inhabitants were ordered to "make sufficient chimneys" in their dwellings. It was lucky the buckets were provided, since in September, 1594, there was a serious fire, which involved the Town Councillors in a duty harder than that of providing the said buckets. This duty consisted in visiting the districts of Northamptonshire, Gloucestershire, Derbyshire, Leicestershire and Berkshire, to raise funds for the relief of the victims; which proceeding, however odd it may seem on the part of a municipality nowadays, was, as Mr. Fripp justly says, "a recognised form of insurance." If you helped your neighbour after a fire, you had a claim on him when your turn came. A patent from the Crown had to be taken out to authorise the proceedings, it is true; but the extent of the system is shown by the striking fact that Richard Quyny alone—the hero of the book—raised £46, perhaps some £700 of our money. It is true that he spent £22 in doing so; but, even so, the relief was well worth having. Of the £46 in question no less than £7 11s. came from "some of the colleges at Oxford." In another year Stratford fell a victim to another and yet more serious fire. One hundred and twenty houses, eighty other buildings, and £12,000 worth of goods—a colossal sum for the day—were destroyed, and four hundred people left homeless. To make matters yet worse, it was a time of serious dearth, especially of malt, then—as Mr. Fripp might have explained more fully—a necessary of life, since beer was drunk at every meal. A Malt Commission was set up to see what amount of malt every citizen had in his house. Malt in fact had become an investment, and there were rumours of a corner in wheat. The borough, in fact, was in such a state that friend Quyny went to London officially a second time to secure another patent—the second in two years—for raising a second fund for the victims; and so acute was the distress that he was again despatched to London next year to present a petition from the Corporation to the Queen's Exchequer begging for the remission of the town's share of the subsidy and of the edict restraining the making of the much-needed malt. The first request was not granted until January 7, 1599, and the journey cost the Corporation £40 in all; but it was well worth it in the end. Quyny—the name is only a variation of the familiar Quinney—was next appointed a member of the Committee appointed to survey the Corporation property, and to report on what had been done by tenants in the way of repairs since the second fire. One citizen had "thatched a tenement which should be tiled," and he was a baker, whose trade imperilled his neighbours. It is some evidence of the poverty of the town that he was given "*three years* to tile it." His neighbour, we read, "hath built new and tiled two bays with a fair chimney," thereby doing his duty as a citizen; another had tiled four bays (divisions of the roof consisting of the space covered by a pair of crossing ribs, p. 161) on one side of his house, two on the other, four and five bays still remaining untiled. "The executors have .... six years' liberty to re-edify all the rest, videlicet seven bays." An old Mrs. Burdett asked her absent son, through a friend, "to help her a little toward the tiling of her house. She hath laid on 500 tile this last week, and oweth both for lime and tile 8 or 10 shillings, the which if he would make up 30 or 40 shillings, she might now have her house finished good [and] cheap, a friend [being] willing to help her unto tile more reasonable and workmen more easy to be had." What an ideal is in this last sentence to-day!

Between the two fires—on May 4, 1597, in fact—Shakespeare bought New Place, then in a partly ruinous state. When he had finished with his restoration he had some stone to spare, enough indeed to make up a load; this the Corporation bought and used to repair the famous Clopton Bridge. The entry in the town accounts—one of the most interesting items in a book full of new facts—was made on January 12, 1599: "pd to mr shaxspere for on lod of ston xˢ." The words remind us that if New Place has perished, some of the stones with which it was restored yet stand in that glorious bridge to-day, and that they lay for nineteen months in Shakespeare's garden.

But New Place has yet another architectural thrill, since Mr. Fripp associates with it—rightly, beyond all doubt—two passages in "Henry IV," Part II (I, iii, 41-6, 50 ff.) with Shakespeare's building operations there. Do not they embody all the wit and wisdom of all architects since time began? Let us quote the first.

> When we mean to build,
> We first survey the plot, then draw the model;
> And when we see the figure of the house,
> Then must we rate the cost of the erection;
> Which, if we find outweighs ability,
> What do we then but draw anew the model?

Begin with your site; get out your plan; erect your elevation ("the figure of the house"); and if your client cannot run to it, make a new drawing. Surely Shakespeare was his own architect at New Place?

But we have not yet done with the Shakespeare family. John, the poet's father, sold his neighbour a strip of land on the edge of his garden, 84 feet by 18 inches, for a boundary wall. Not only is the length of the Shakespeares' garden thus for the first time established, but we get a glimpse into the worries of the householder in the sixteenth century which makes us feel that all men are indeed brethren. *His neighbour had eleven children under fifteen.* No wonder John Shakespeare was ready to sacrifice eighteen inches of width for the sake of a good wall between himself and Next Door!

The most interesting part of the whole book, from an architectural standpoint, is that we can identify with Mr. Fripp's assistance some of the houses actually rebuilt after the fires of 1594 and 1595. The lovely gabled building in the High Street now known as Harvard House is an example of the first; it was put up when the girl who was to many John Harvard was but twelve years old. Another example is the group of houses in Wood Street, of which Master Parsons' was reported "newly re-edified" in April, 1599; while one William Greenway, a woollen-draper with ambitions, reconstructed several small shops as one large one. Big business was not unknown at Stratford then.

A last word as to Richard Quyny himself. Like his father, he was a mercer; but those were spacious days when there was no Union of Master Builders, and to the silks and wools, the Worcestershire hose and silk buttons of their nominal calling they added dealings in bell metal, red lead, bricks and tiles. But it was not for such things that the name of Quyny is immortal; for Quyny had a son, and that son married Shakespeare's daughter Judith. For the Shakespearean student this book is indispensable; that it has its interest for the lover of architecture also, and the historian of social progress, I have tried to show.

* By Edgar I. Fripp. Oxford University Press, 1924.

Planning for Good Acoustics.

Extracts from a Paper by Hope Bagenal [A.], delivered at the R.I.B.A. on the 19th

I would like in this paper to carry forward the idea behind Mr. Waterhouse's words and suggest how to regulate our dealings with *echo*. There is no reason indeed why that nymph, when given a good home, should answer back as is her habit near woods and on the edge of moist river lawns. Within four walls she can be tamed and instead of striving with her companion can readily be induced to reinforce his words in a well-timed assent. But much depends on the distance she sits from her looking-glass. She will use walls, floor and ceiling if she is permitted and dearly likes a good dome. But the art of the designer lies in confining her glances to certain surfaces.

Open-air Theatres.—The classic theatre has so many vital lessons in acoustic planning that no apology is necessary for glancing at it. The Greek type was a very highly developed acoustic instrument, the Roman was less excellent. The excellence of the Greek theatre was due to three contributing factors:—

(1) The sound was intensified near the source by a number of useful reflections.

(2) The passage from speaker to listener was kept clear and free from obstacles.

(3) There were no disturbing reflected paths back from listeners to stage.

The characteristics of the Greek theatre are the high, narrow *logeion* or stage platform (conceded to be ten or twelve feet high at Epidaurus and Priene); the skene wall behind this; and the large paved orchestra area in front of it.

The small depth of the stage and, therefore, the nearness of the players to their back wall, insured its efficiency as a reflector. The height of the stage above the orchestra level gave reflections at a useful angle from the paved area below. Thirdly, there was the floor of the stage giving a less useful reflector.

The height of the stage also gave a wide angle of impact to the direct sound from player to audience. This is especially important when there are no reflections from the ceiling. Sound passing over human heads at a small angle is rapidly absorbed. Therefore, the wider the angle of impact the better. The plan of the classic theatre insured an equal distribution of sound in all directions, and the section in the case of the Greek theatre was usually without reflecting surfaces likely to cause even local interference. Vitruvius says explicitly in Book V (3): "In short, the building should be so contrived that a line drawn from the first to the last step should touch the front angle of the top of all the seats, in which case the voice meets with no impediment."

Since, in addition, there was no roof to the Greek theatre, the reverberation was nearly as short as in the open air.

Use of Resonators in a Greek Theatre.—But the fact that there was no reverberation meant that the energy condition was low. The size of the classic theatres was enormous, seating as much as sixteen to twenty thousand people. The rear seats were sometimes at a distance of more than two hundred feet from the stage. All possible reinforcements were therefore desirable. A method of reinforcing by resonance was probably secured by the following means. The wood floor of the stage in contact with the feet of the player acted as a resonating surface. In addition to the stage floor were the *pinakes* or wooden panels placed between stone columns in the supporting wall of the stage. Rebates for these are still to be seen. Each wooden panel in this position would undoubtedly reinforce the sound if in contact with the wooden floor upon which the players stood. The declamation of the players was a kind of rythmical shouting or chanting, and probably required considerable training. The frequent and sonorous vowel sounds of the Greek tongue, produced as musical tones, conveyed the sense to the remotest seats. Stage floor and "pinakes" together formed the sound-box.

These points in acoustic design have a direct bearing upon modern problems. A hard rear wall some ten feet behind the speaker may make considerable difference to audibility in the case of a large hall or in the case of a pulpit. The usefulness of the stage floor as a reflector is one of the factors which make the difference between the opera house and the concert room. The upper galleries of Covent Garden rely greatly upon the stage floor, and it is well known that the speaking voice can be heard well there. The concert room would be improved by a clear, hard floor space round the singer or solo instrument. It is bad design to bring orchestral instruments or platform seats close up to solo performers. A clear orchestra area (such as was required in the National Theatre competition recently held) immediately in front of the Albert Hall platform would increase the useful sound to galleries.

Wood surfaces could also be used advantageously as resonators. They should be in contact with the singer or instrument. The wood surface of the platform floor should be jointed to the front of the platform which would then act like the Greek pinakes; and the same principle could be applied to the wood panelling of the platform recess. A powerful singer is really an instrument in contact with the floor. Resonating surfaces increase his power: and they are specially useful for musical instruments like 'cellos and double basses.

There was one characteristic of the modern auditory lacking in the classic theatre, namely, a certain fulness of musical tone due to reverberation. The lack of this must have been felt as the dimensions of the theatre increased. Two attempts were made to compensate for this. The Greek *echeia*, as described by Vitruvius, was an attempt to place resonators in the form of enclosed volumes of air responding to tones in the neighbourhood of the audience. The fact of these echeia is disputed, and no vases corresponding to those described in the Vth Book of Vitruvius has been actually found.

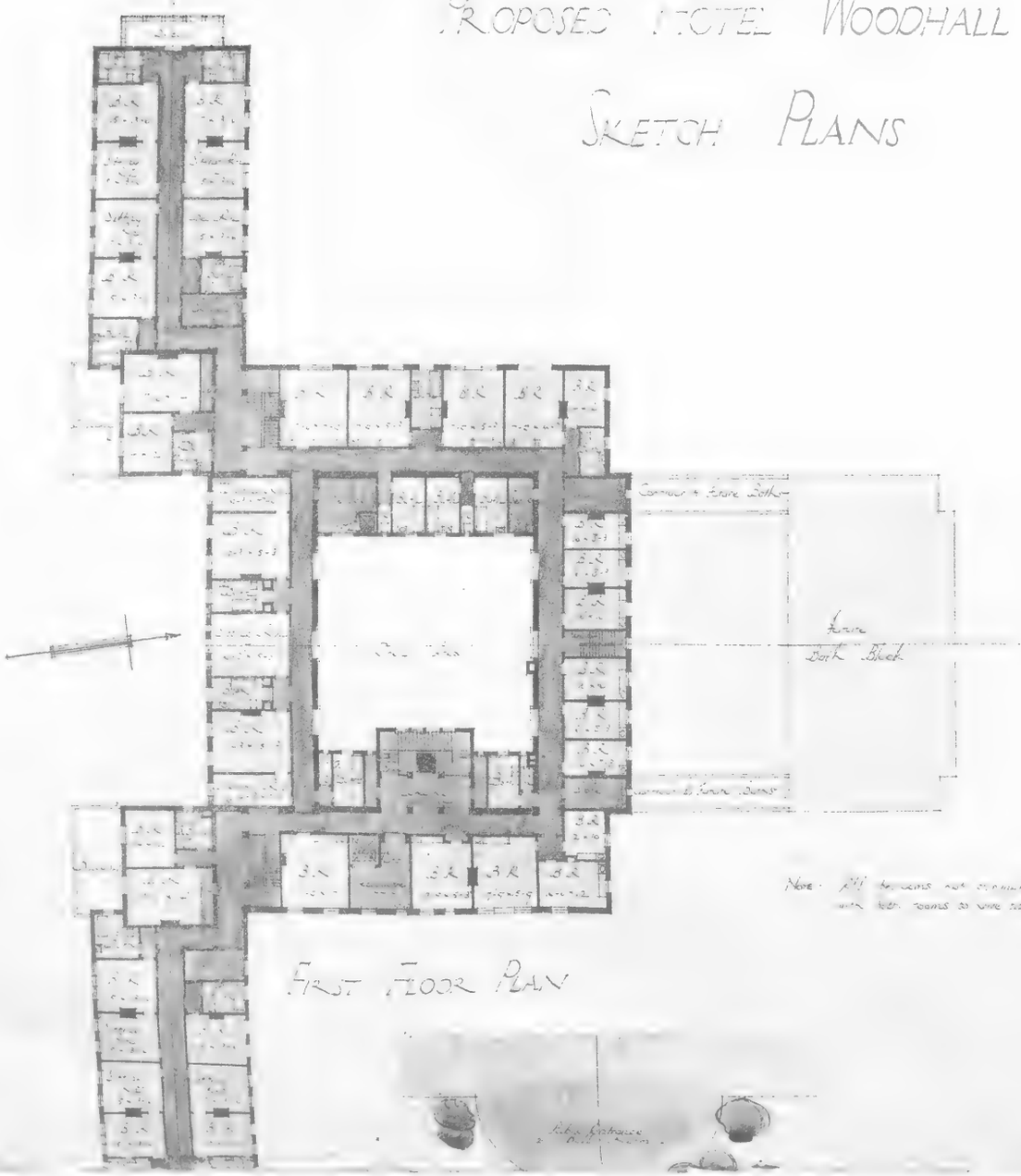
In the Roman theatre the stage was lower and was brought forward so that the orchestra became a semicircle. The great width of the classic stage of this shape must have constituted a danger. Echoes would certainly be returned from wing walls. In these walls the periakti may have been placed—a series of prisms, triangular on plan, rotating upon an axis and providing three sets of scenery. If the line of these periakti was placed at an angle of 45 deg. to the stage the actor's voice would be reflected out into the hemicycle. Vitruvius mentions the practice of the singers to the flute turning towards the "valvas scenæ" (some part of stage scenery) in order to project their voices. In the Roman theatre the orchestra space was frequently used for seats. The reflecting surfaces thus sacrificed was partly compensated for by the extra floor area of the stage, but an important addition occurs in the Roman theatre from an acoustic point of view, namely, the roof set at an angle above the stage. But the reflections from this roof would not have given the consonance recommended by Vitruvius.

The lesson of the classis theatre remains, however. It is this: that reflecting plus resonating surfaces *near the source of sound* will work wonders.

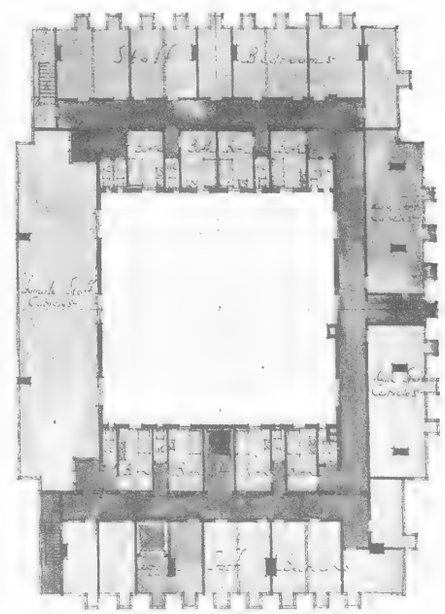
Churches.—The mediæval church was the anthithesis, in acoustics, of the Greek theatre. The enclosing masonry walls and vault acted as bright mirrors to all sounds. The congregation occupied only a fraction of the enclosing surfaces. The priests, like the classic players, chanted or intoned their words, but for a very different reason. The inter-reflections from all surfaces caused what is known as *reverberation*. The term in Italian or French refers to *light* as well as to sound and means *dazzle*. It means a high energy condition for all sounds produced within the building. Whereas the Greek theatre was an instrument low and distinct, the mediæval church was loud and incoherent. It also reinforced certain tones rather than others for a reason I cannot enter into here. The result was that intoning was rendered inevitable by the duration of each syllable. Also the intoning on a *certain note*, or in

Proposed Hotel Woodhall Spa

Sketch Plans



First Floor Plan



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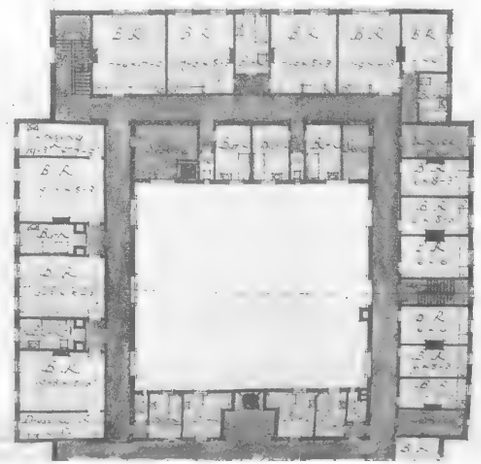

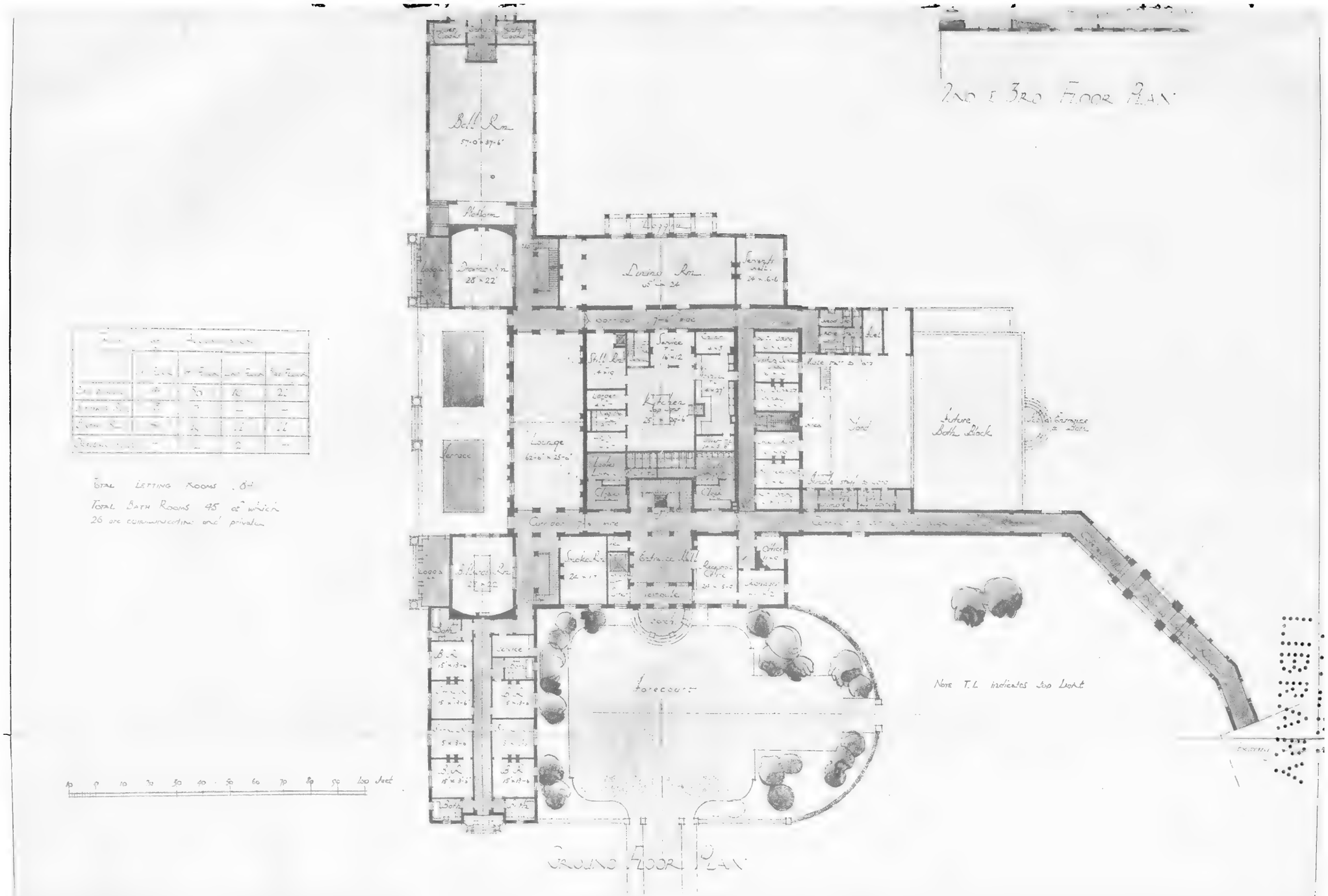

		1st Floor	2nd Floor	3rd Floor
Bed Rooms	48	30	16	2
Bed Rooms (S)	2	–	–	–
Bath Rooms	46	26	12	4
Private Bath Rooms	–	–	2	–

Total Letting Rooms 80
Total Bath Rooms 45 of which
26 are communicating one private

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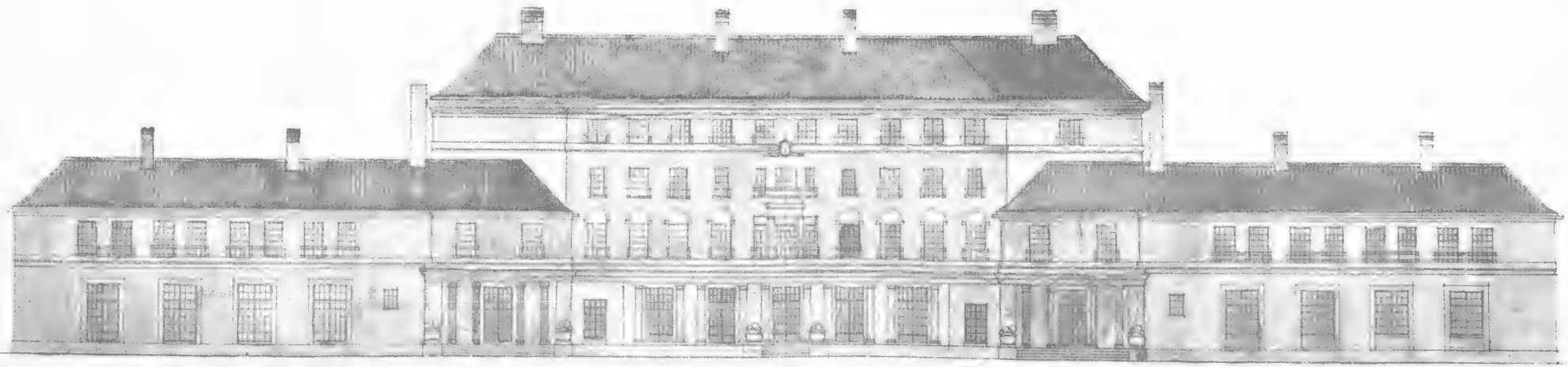
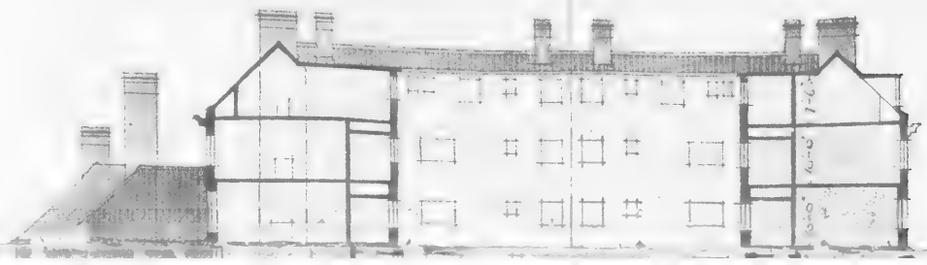
PROPOSED HOTEL AT WOODHALL SPA, LINCOLNSHIRE.

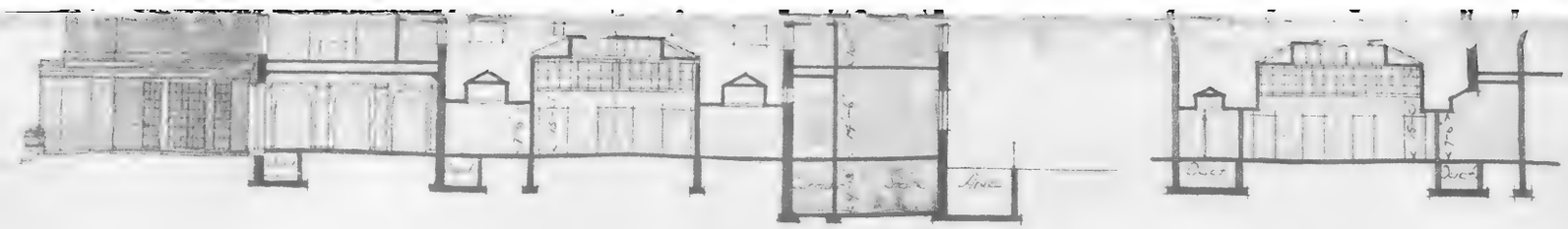
STOCKDALE HARRISON & SONS, ARCHITECTS.

PROPOSED HOTEL WOODHALL SPA LINCOLNSHIRE



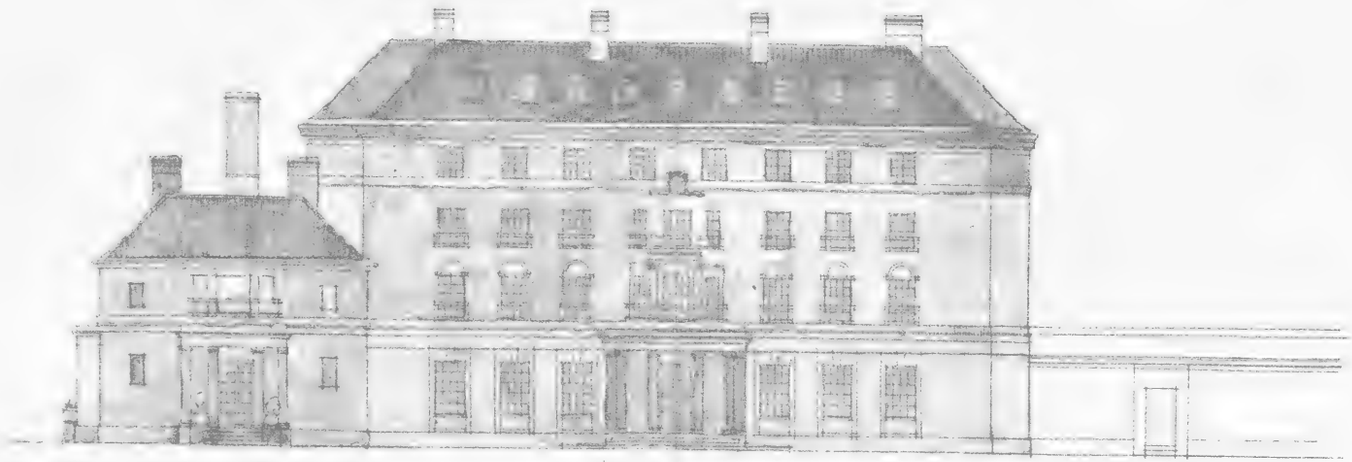
GARDEN FRONT SOUTH





Cross Section

Longitudinal Section
through Kitchen



Entrance Front (East)

Stockdale Harrison & Sons
Architects
7 St Martins E Leicester

1927

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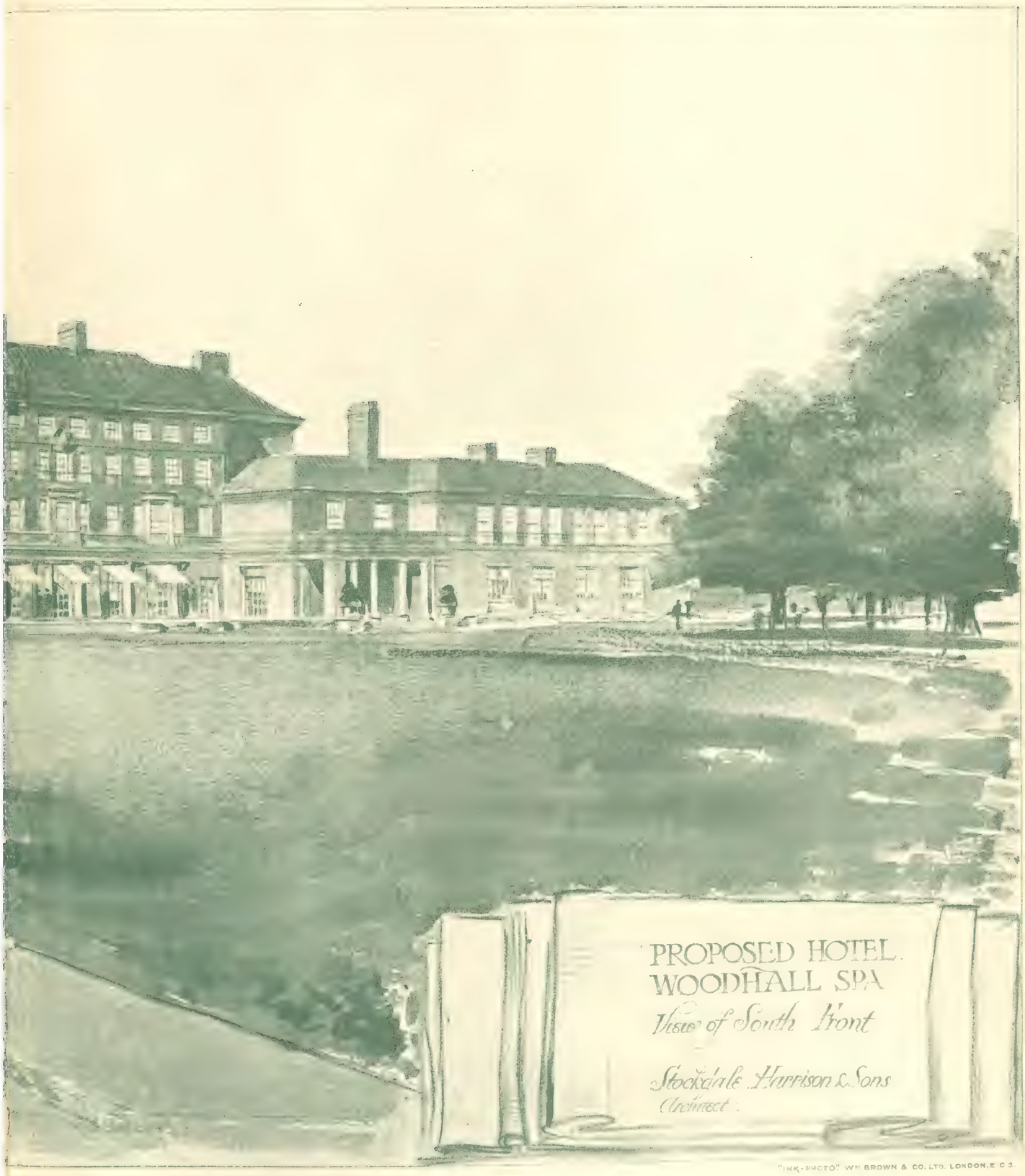
PROPOSED HOTEL AT WOODHALL SPA. LINCOLNSHIRE.

STOCKDALE HARRISON & SONS

SOUTH FRONT OF PROPOSED HOTE

STOCKDALE HARRISO



AT WOODHALL SPA. LINCOLNSHIRE.

& SONS, ARCHITECTS.

a certain tonality, reinforced by the church, was likewise rendered necessary. These acoustic conditions produced their own characteristic results in choral music and in intoned liturgy. The speaking voice from the pulpit never was and never can be easy under such conditions.

In modern church design a compromise is necessary. It is possible to preach slowly with a reverberation of three seconds, yet this very slowness is often a matter of complaint by popular preachers. It is difficult to apostrophize or denounce clearly where there is a long reverberation. On the other hand, the choral Eucharist sounds well. The compromise is best effected by placing the pulpit with a back wall behind it and a reflector above it at an angle of 45 deg. and extending, if possible, some feet over the pulpit, and by treating walls and vault with an absorbent plaster.

The best Anglican auditory is the City Church. Wren must have thought a greal deal about acoustics. He gets to the heart of the matter when he says:

"The Churches therefore must be large; but still, in our reformed Religion, it should seem vain to make a Parish-church larger, than that all who are present can both hear and see. The Romanists, indeed, may build larger Churches, it is enough if they hear the Murmur of the Mass, and see the Elevation of the Host, but ours are to be fitted for Auditories . . . to build more room than that every Person may conveniently hear and see, is to create Noise and Confusion."—(Letter on the City Churches.)

The lesson of the mediæval church is that a long reverberation is necessary for the finest choral (unaccompanied) music, but that requirements for choral music and for the speaking voice are *mutually conflicting*.

After dealing at length with the acoustic problems connected with the House of Commons, the speaker went on to say:—

We have seen that there exists a valuable British tradition in one class of auditory, namely, that for debate. But the important evidence placed before the 1868 Commission remained undeveloped except for E. M. Barry's design for a new chamber. Until the recent Building Research Board experiments, the American co-efficients of absorption were all that the architect had to go upon if he should desire to embody the House of Commons tradition in a building and to do his work with some precision.

The requirements for a good absorbing material are: 1. Cleanliness. 2. Durability.—The absorbents available for architects at present fall into two classes. First the soft materials requiring a canvas screen, and secondly the plasters and tiles. Although I yield to none in my admiration of the American results, it must be clear to architects that direct experiments upon English materials and fittings is most important. American methods are not the same as ours, and all kinds of factors connected with building practice enter into the problem. The results of the Building Research Board experiments upon British materials *fixed exactly as an architect would have them fixed*, have already been most valuable. These experiments were undertaken at the request of Mr. Herbert Baker and the Indian Government on account of the work at Delhi, and were directed by Mr. H. O. Weller (late director) and his assistant Mr. P. W. Barnett, and the work is now being carried on and amplified under the new director Dr. Stradling. A room was found and treated in order that it might give in its initial state a very long reverberation. Into this room the materials to be tested were brought and their effect on the reverberation was noted. The first result was that an architect could enter the test chamber and hear for himself the result on the energy condition of the room of introducing the material suggested. The experiments were necessarily empirical, but very great care was taken in calibrating the room and in taking readings. Mr. P. W. Barnett made himself master of the Sabine theory and undertook many of the readings. Some of the many results obtained can be stated roughly as follows:—

The most powerful absorbent of all (for pitch C4) which an architect can use is slag wool behind wire netting. The efficiency of this absorbent declined rapidly above C5—that is for higher notes.

The next most efficient absorbent for C4 is Cabot quilt. This material is easy to apply and is hygienic and not harmful to the touch like slag wool. It is slightly resonant. (The brown paper envelope and the enclosed volume of air probably causes this resonance.) It improves the speaking voice conditions, but will not give the best results for chamber music owing to unequal reinforcing of tones. It was fixed in two layers on 2 in. by 1½ in. battens, 2 ft. 8 in. apart and had thus 1½ in. air space behind it.

The next most efficient absorbent is 1 in. hair felt. Felt is a material used very widely in America and was found at Harlesden to make, in conjunction with wood, the best conditions for chamber music. But if felt is to be widely used in England it must be made really moth-proof and fire-proof. The felt was also fixed on 2 in. by 1½ in. battens.

All these three materials require canvas screening. Of the wall panellings cork 1 in. thick framed in wood with an air space behind gives fairly high absorption for C4.

Celotex board was found to be an efficient absorbent and to give excellent results for chamber music.

Of the permanent flooring materials rubber carpet $\frac{3}{16}$ in. thick was found to be the most efficient.

Owing to the courtesy of Professor Paul Sabine of the Geneva Laboratory, Illinois, experiments were undertaken upon an acoustic plaster using his recipe as a basis. These experiments produced interesting and useful results and are still in progress. An acoustic plaster was developed causing for C4 at least 20 per cent. reduction in the reverberation of the room. (This figure must not be taken to represent a Sabine co-efficient.) A surprising result of the experiments in this class was the efficiency of coke breeze blocks 2 in. thick. Mr. Barnett is of the opinion that coke breeze slabs having a finishing coat of acoustic plaster would make a very efficient absorber. In designing a building like a modern church or council chamber, where the audience factor is small compared to the volume, and where a short reverberation is essential it may be necessary to cover all the wall area above a certain level with an absorbent plaster. In such a case an absorbent of the kind suggested by Mr. Barnett would be most useful.

In addition to the experiments at Harlesden some interesting experiments have been carried out by Major Tucker of the Signals Experimental Establishment, Woolwich, upon various samples of acoustic plaster supplied by the Building Research Board. Experiments on Sound Transmission are also in progress at the National Physical Laboratory under the direction of Dr. Kaye. The physicists are now interested in our problems and it is for the architects to place their conundrums before them. Formative research will come in response only to a real demand formulated by architects. We spend our lives in experiencing the shapes and materials of buildings, and we are the first to hear the complaints. If we listen as well as look we can make valuable acoustic observations, we can keep records of results, and if we are in touch with the physicists we can suggest the lines of research by which we ourselves are to be the first to benefit.

BECONTREE.—The London County Council have prepared a scheme for the erection of another thousand houses on the estate at Becontree, the cost being estimated at £600,000.

BERMONDSEY.—Plans passed: Steel building, Spa Road, for Salvation Army, by London and Wales Steel Construction Co.; alterations Ancient Foresters, Southwark Park Road, for Messrs. Douglas Halse & Co., Ltd.

BOLTON. The Corporation proposes in the new Corporation Bill to seek powers for carrying out the extensions to the Town Hall, the erection of Sessions House, Police Courts, Offices, Library, Art Gallery, Museum, Technical School and other municipal buildings. Power also is to be sought to acquire land for the general development of the town. A sub committee have been appointed to deal with the preparation of a scheme for the erection of premises for the lighting depot, including residence for the lighting superintendent. The Health Ministry have sanctioned the arrangement by which houses will be erected by Messrs. William Cornall & Sons and Messrs Leigh Bros., and purchased by the Corporation on completion.

The Development of Built-Up Areas.

Sixth Town Planning Lecture, University of Birmingham, by Professor William Haywood, F.R.I.B.A.

The method of procedure usually adopted in respect to improvements in the built-up areas of English towns is so devised that negotiations for affected property and land may proceed with as little interference as possible from unscupulous action by speculators in land values.

In those areas of boroughs which are not yet built upon, however, this policy has been replaced by a procedure under the Town Planning Acts, which protects the community against such speculation; and it is now evident that built-up areas also should be brought within the Town Planning Acts, and be given freedom in planning under the protection of a reasonable court of appeal against attempted exploitation.

Meanwhile, until this or some similar protection is afforded, we lack the stimulating influence of public opinion on this most important and urgent phase of town planning activity, since schemes for the revision of our congested areas are usually far advanced towards adoption before the public is advised of them.

English methods differ materially from American practice, which relies on popular demand before official action is taken, and where the bugbear of exploitation is avoided before the adoption of a scheme, by the absence of official approval, and is adjusted subsequently, by some form of betterment levy against benefited property or by the assessment of a legal tribunal.

With respect to Birmingham, the report of the "Housing Inquiry Committee" published in October, 1914, recommended that a plan for developing the central areas of the city be put in hand immediately, and the responsible City Departments have been working at such a plan ever since, although for the reason already given, their work has not yet been made public.

In the comprehensive arterial road scheme put forward by the Public Works Department, and adopted by the city in 1917, we have the essential skeleton of our future town plan, with the exception of a small central area. This area is shown on the map illustrating the scheme, but is not included in the project for which special powers were then obtained.

It is chiefly by the conditions in and about this centre that Birmingham, with nearly 1,000,000 inhabitants and a world-wide reputation for municipal vigour, has been known and found wanting in character. And it is by the class of development in this portion of the town that our capacity to rise above an indifferent provincialism in architectural expression will be judged by future generations.

Architecture in Town Planning.

Seventh Lecture by Professor William Haywood at the Birmingham University.

The appearance of city buildings is much affected by the character of the roads upon which they stand. The formal planning of the Place de la Carriere and its adjuncts at Nancy, and the free curves of the High Street, Oxford, are well-known examples of formal and informal road planning which are favourable to architectural expression. The interminable straight streets of cities arranged in chessboard fashion, establish one of many conditions unfavourable to the effective combination of roads and buildings.

An infinite range of nuances in design is made possible by the right association of roads and buildings. The setting of the Paris Opera House, for instance, is not without some dramatic effect; yet we know that its designer, Garnier, bitterly resented its insufficiency; and without doubt a setting of different proportion and shape would vastly improve its values.

On the other hand, the citizens of Ulm felt that the full effect of their beautiful Cathedral was obstructed by adjoining buildings which on removal were found to be so necessary a foil to the scale and character of the church that they were at once replaced.

All people are affected, directly or indirectly, by their environment, and since the quality of buildings is so large a part of environment in town life, it is worth while to note that this quality is determined chiefly by the predominant character of architectural patronage, and less directly by the actual designers of buildings than is usually supposed. The magnificence of Ancient Rome was a reflex of the political force of its Dictators; the adventurous and soaring architecture of our old cathedrals is due to the religious fervour of the middle ages; the splendour of Renaissance architecture originated in the stately outlook of old aristocracies; and much of the present architectural force of Paris comes from Napoleon the Third's appreciation of the great political significance of national architecture. Out of such patronage as this fine building is almost inevitable.

We live in a democratic and commercial age, and the education of democracy to an appreciation of something more than mere existence has been a necessary precedent to any demand for great architecture. But commercial and democratic America now asks for fine building and is getting it; England, too, shows some signs of awakening, and wherever people have come to an appreciation of fine living, an adequate architectural expression in town structure will not be lacking.

"American Architecture as I Saw It."

By Mr. E. W. B. Scott, A.R.I.B.A.

Résumé of Lecture given before the Sheffield Society of Architects and Surveyors at the Sheffield University on the 13th November, 1924.

The position of architecture in America is a peculiarly interesting one. Perhaps for the first time in history we have a wealthy and highly complex civilisation in a new country almost without a past, but possessing and venerating the traditions of past ages in other lands.

As a result we find them able and willing to build extensively, selecting the best from the traditions of Europe, while themselves unhampered by any archæological dead hand. The American cities, like ours, are full of uninspired buildings of the last century, and they are pulled down ruthlessly to be replaced by better, while their cities are extending at a rate undreamed of over here.

The five weeks I spent in the States have not left on my mind the picture the late Mr. Bertram Goodhue drew at the R.I.B.A. when he described American architecture as undisciplined, aimless, chaotic and altogether inferior.

My impression is rather that an art that knows most definitely what it is about; one that, making the fullest and frankest use of the work of other ages, is working out a manner in architecture which will interpret this complex civilisation.

It seems to me that sincerity and singleness of aim are teaching them to use the new materials and methods and to meet the new demands of this age better than is the case anywhere else.

There vast wealth and opportunity have helped; so undoubtedly has the Beaux Arts, but it is the realising new conditions and the simple faith that they ought to be met in a rational manner that is their strength.

Of course this means experiment; they are bound to cut new tracks in many directions in this pioneer work, and much work will be in the wrong direction. The men who never made a mistake never made anything.

If Mr. Goodhue meant that they have not yet reached finality it is perfectly true, but they are in the right road and the rest of us are only toiling painfully behind.

Take Goodhue's own work. I suppose he is best known for his Gothic churches, in which he has approached nearer to the spirit of the old mediæval builders, perhaps, than any man since the Renaissance, but I venture to say, lovely as it is, that is not the work by which he will be longest remembered. He had another mood, a mood in which he broke away from tradition and reached forward into the future; disencumbering himself of Corinthian columns and Perpendicular windows he attempted to get right down to the bones of architecture—to begin from the needs and requirements of the particular case and

build, relying for his effect on almost stark simplicity and beauty of proportion.

Of course he made mistakes, and some of his work caused howls of rage; but he was one of the very greatest of the architects of this age—he was a pioneer, and his work is of immense significance.

It is, therefore, future possibilities more than present achievements that I wish you to look for in my views to-night, and this applies not only to the public buildings but also to those which I went particularly to study—industrial buildings.

Legal Note.

G. L. Elkington, Architect, *v.* The Borough of Wandsworth.

In the King's Bench Division on November 13 Mr. Justice Branson heard an action brought by Mr. George Leonard Elkington, of Woodborough Road, Putney, architect, who sued the Mayor and Council of the Borough of Wandsworth for £3,215 10s. 2d., balance of professional fees alleged to be due to him under a retainer in connection with the housing scheme on the Furzedown Estate. The scheme was instituted by the Council in the year 1919 on the terms expressed in the General Housing Memorandum, No. 4.

Mr. Compston, K.C., and Mr. Croom Johnson appeared for plaintiff and Mr. Wingate Saul, K.C., and Mr. Crouch for defendants.

Mr. Compston said the retainer was dated October, 1919, and the scheme was for building 400 houses. Admittedly only 153 were erected, and the questions for the Court were firstly, what was the proper remuneration for the houses erected and secondly, what was the right amount owing when the work was abandoned. The Council agreed to employ the plaintiff as an architect for the scheme and the scale of fees was to be according to the rates of the Royal Institute of British Architects. The method of remuneration was later brought into accordance with the memorandum of the Ministry of Health, number 4, with plaintiff's concurrence. This stated that the remuneration should be 5 per cent. on the first 12 houses, 2½ on the next 60, and 1½ per cent. on the remainder. The memorandum, however, contained no provision for payment where the schemes had been abandoned, but reading the words of the memorandum of the Royal Institute of British Architects as to abandonment of work into the Ministry's circular, payment was a question of contract and not *quantum meruit*. Plaintiff was, Mr. Compston contended, entitled to charge for the houses for which contracts had been made. It happened that the most expensive houses were contracted for first, and it was upon the cost of these plaintiff based his 5 per cent. charge. The whole matter depended upon the construction of the contract as to completed or abandoned work.

Mr. Wingate Saul, K.C., submitted that the proper way to calculate the remuneration was to estimate the final cost and divide it by the number of house built, which would give the average cost. In this case it was £737 1s. 2d. Five per cent. of this amount multiplied by twelve would give the amount due for the first twelve houses. Two and a half per cent. of that figure would give the second percentage and so on. That was the only way by which the calculation could be fairly made in accordance with the words of the memorandum. Plaintiffs' charges ought to have been based on the cost of the completed houses taken as a whole. If that was not done he would be entitled to be paid for the incompleted work more than for completed work because under R.I.B.A. memorandum the scale was 8 per cent., where the contract did not exceed £600.

His Lordship, giving judgment, said that the two points of law raised in this case were (1) whether that the memorandum of the Royal Institute of British Architects could be included in the memorandum of the Health Ministry; and (2) as to the abandonment of the scheme and the right of the architect to make his charges accordingly. Both of these questions were material, but he did not think it possible to say that the R.I.B.A. memorandum was incorporated in that of the Ministry of Health in the ordinary sense of the expressions used. The true construction of the contract was such that the defendants were right on their first point that the plaintiff was not entitled to make his charges on that ground. On the second point he had to decide that the contract made included the work done by the plaintiff after abandonment. He was again against the plaintiff on this point, and the working out of the actual figures must be left to the parties to decide, or else be left to the decision of an official referee. So far as he (his Lordship) was concerned the case must be adjourned *sine die*.

Decorations and Renovations.

"The Decoration and Renovation of the Home." By A. S. Jennings, F.I.B.D. (London: Trade Papers Publishing Co., Ltd. New Edition. 12s. 6d.).

This book was originally published at two guineas, but we think that the present price should attract a larger number of purchasers. There is a vast amount of information, and information too of a useful character.

On page 14 is given an interesting table of percentages of light reflected by different objects, and on page 17 the chromatic circle invites careful study, in conjunction with the text explanatory of this diagram. A feature worth noting is the collection of plates giving actual samples of the decorative preparations of the various well-known firms.

The references to the effect of various colours upon health are worthy of careful attention. Mr. Kemp Prosser, a specialist in this study, has been engaged at various hospitals to give effect to his views; amongst others may be mentioned the Maudsley Hospital at Denmark Hill, and it would be valuable to know what percentages of cures are attributed to his treatment.

The section dealing with paperhanging is perhaps the best in the book; but instead of writing of vertical and horizontal joints in scalloping, it would be better to designate them as cut or scribed joints. The reproach that no biography of Robert Adam has been published has been removed as a result of Mr. A. T. Bolton's important work concerning this architect.

"The Architect" Fifty Years Ago.

NOVEMBER 21, 1874.

DECORATIONS OF THE SORBONNE.

The four large statues belonging to the restored *facade* of the Sorbonne have just been placed *in situ*. At one time the places of the old statues were ordered to be filled by representations of Prudence, Justice, Courage and Temperance, and the figures were commenced, but were never terminated. The Sorbonne is under the combined guardianship of the Commission of Beaux-Arts, the Prefecture of the Seine, the Academy, and the Faculty of Theology, and these bodies determined that the sculpture should be according to the plates in the great work of Félibien. The two upper niches are occupied by St. Thomas Aquinas and Peter Lombard, and the lower niches by Bossuet and Gerson. St. Thomas wears the habit of a Dominican, and is represented in the attitude of preaching; his right hand is raised, while the other supports an open book. Peter Lombard, the "Master of the Sentences," holds his great book in his left hand, his right hand is slightly advanced in the attitude of affirmation. He wears long hair, which is intended to recall the fact that it was he who, in the eleventh century, obtained for the serfs the right of allowing their beard and hair to grow. He is dressed in a blouse-like garment called a *bliant*, with a hood, being the dress in which the doctors of the Sorbonne are represented in a bas-relief of the University in the western door of the church of Notre Dame, of Paris. Bossuet wears his bishop's robes, and both his hands rest on a book which is held beneath his right arm. John Gerson has a book in his left hand, the right hand supports his head, which is slightly inclined in an attitude of reflection.

All the statues are life-size, and have been executed after the instructions of Monseigneur Maret, bishop of Sura, and Dean of the Sorbonne.

The ancient statues which filled the niches were taken down at the first revolution and carried to Saint Cyr; they have now been brought back to the Sorbonne, and may be seen in the great inner court of the establishment.

TORQUAY.—Mr. G. H. Widdows, F.R.I.B.A., has been appointed architect to prepare plans for the new school at Westhill. Plans passed: New glazed front, Central Hotel, for Mr. Easterbrook; additions to Victoria and Albert Hotel, for Hotel Co.

THURNSCOE URBAN DISTRICT COUNCIL.—Housing Scheme No. 2. The Council require the services of an architect to lay out the site, prepare and submit the necessary plans, drawings, specifications, quantities and general conditions for the erection of 50 dwelling-houses for the working classes on site immediately adjoining the Council's Housing Scheme No. 1, off Back Lane, Thurnscoe. The person appointed will also be required to supervise the erection of the dwelling-houses, issue certificates, measure up and submit final accounts and carry out the duties generally accepted by architects in connection with the erection of dwelling-houses. Applications stating terms and conditions and marked "Architect," to reach J. Ledger Hawksworth, Clerk of the Council, Council Offices, Bolton-upon-Dearne, Rotherham, on or before Monday, the 24th inst.

General News.

BARNES.—Plans passed by Urban District Council: 18 houses, Bicester Road, for Messrs. Cort & Cory; alterations and additions, Victory Inn, Temple Sheen, for Messrs. Fisher & Sons; steel constructed store, Ship Lane, for Messrs. Watney & Co.; 6 houses, Nevrek Road, for Messrs. Newborn & Smith; Church hall, Rectory Grounds, for Rev. W. Patrick Dott.

BENFIELDSIDE.—Durham county architect has prepared a scheme for remodelling the elementary school at a cost of £8,580.

BLACKPOOL.—Central Parsonage for Holy Trinity Church, Central Road, South Shore, architect, Mr. A. C. Moore, of 19 Abingham Street. Contract placed with Messrs. Chadwick Bros., builders, Little Layton.

BLAYDON.—A new school clinic is to be provided by the Durham Education Committee in accordance with a scheme proposed in 1921.

BOURNEMOUTH.—The Education Committee have approved plans for extensions to the Malmesbury Park School.—The Borough Librarian is to negotiate regarding a site for a branch library at Southbourne.—The Office of Works are to erect a telephone exchange at Southbourne.—The Council are to erect 42 houses on the Southill estate.—Plans passed: Seven houses, Bishops Road, for Mr. H. Barnes; 9 houses, Wilson Road, for Mr. W. Hayward; 15 houses, Middleton Road, for Mr. J. T. Rowley; 10 houses, Victoria Avenue, for Mr. W. Noble; 10 houses, Grafton Road, for Mr. C. Habgood.

CHELTENHAM.—The Town Council are seeking sanction for a loan of £8,150 for mechanical filters and various works at the Dowdeswell reservoir.

COCKERTON.—It is proposed to erect a Church school for about 160 children.

DURHAM.—The County Education Committee have prepared a school building scheme estimated to involve an outlay of £350,000. This includes provision for new schools as follow: Monkton, for 275 and extension to 400 children; Ryton, for 500; Ryton Woodside, for 360; Eppleton, for 1,100; Houghton for 400; Pelton, for 280; Nettlesworth, for 220; Newfield, for 350; Coundon, for 600; Ludworth, for 350; Seaham Harbour, for 400; Marsden, for 400; West Auckland, for 300; Bleach Green, for 470; Brandon, for 990; Burnopfield, for 350; Usworth, for 700; New Seaham, for 800; Swalwell, for 400; and West Cornforth, for 410. The Committee estimate the cost at £25 per school place. Enlargements are proposed as follow: Sacriston, for 120; Haverton Hill, for 160; Willington, for 48; Seaham Harbour, for extra classrooms and art room. The scheme also includes improvements at many schools.—Improvements are proposed at the Judges' Lodgings at the Castle at a cost of £1,200.

EAST RAINTON.—Durham County Education Committee have purchased a site for a new elementary school.

EPSOM.—The London County Council has accepted the tender, £94,351, of Messrs. William Moss & Sons, of Loughborough and London, for the completion of chapel, infirmary and acute wards, etc., at the West Park Mental Hospital.

FRIDAYBRIDGE.—Isle of Ely County Council have decided to erect a school for senior scholars.

GAWSWORTH.—Farm buildings and dwelling-house are to be erected on the small holdings estate at a cost of about £2,500 by the Cheshire Small Holdings Committee.

GLASGOW.—The Royal Hospital for Sick Children is to be enlarged at a cost of £60,000.—The Corporation are to carry out improvements in Victoria Park at a cost of £5,000.—The Board of Health have sanctioned the scheme for extending the Mount Blow Home.—The Health Committee have approved of plans for a new clinic to cost £6,000.

GRAVESEND.—The Baths Committee have approved of draft plans prepared by the Borough Surveyor for slipper baths.

HACKNEY.—Plans passed by Borough Council: 4 lock-up shops, Brooke Road, for Messrs. Goodall & Son; electricity showrooms, Lower Clapton Road, for Messrs. J. Jarvis & Sons, Ltd.; L.C.C. school, Well Street, for Messrs. Roberts & Co., Ltd.

HODSOCK LANGOLD.—Notts Education Committee have purchased a site for an elementary school.

HULL.—The Board of Education have intimated that they will consider plans for the extension of the Grammar School. Amended plans are to be prepared for extensions at the mental hospital.—A site in Igglemire Lane is to be purchased for purposes of an open air school.—The city architect has prepared plans for the conversion of premises at Cottingham into a maternity home.—The Corporation have approved of plans submitted by Messrs. Wellsted, Dosser & Wellsted on behalf of the Polo Field Syndicate for five new streets on the site of the old polo ground.—The Housing Committee have agreed to give subsidies in respect of the following schemes: 8 houses, Newcomen Street, for Mr. G. Spruit; 16 houses, Summergangs Road, for Mr. Simmonite; 4 houses, Cottingham Road, for Mr. M. Barnet; 8 houses, Southcoates Lane, for Mr. R. Ashton; 6 houses, Southcoates Lane, for Mr. Spruit; 19 houses, New Rosmead Street, for Messrs. Lawrence Bros.; 8 houses, Desmond Avenue, for Mr. W. Garbutt.

LEAMINGTON.—The purchase is proposed at a cost of £5,500 of 51 acres at Rushmore Farm for housing and park purposes.

LEEDS.—In connection with the construction of a golf course at Meanwood it is proposed to appoint Dr. A. Mackenzie as architect.—Sixteen public conveniences are to be constructed in various parts of the city at a cost of £6,700.—The following houses to be built: 16 houses, Old Lane, for Mr. Booth; 5 houses, Chandos Place, for Mr. C. Smith; 6 houses, East Moor Crescent, for Mr. W. Rogers.

LEIGH.—Extensions to Hall Lane mill for the Hall Lane Spinners, Ltd., accommodation being made for 12,000 ring spindles. Plans and work by own staff.

LEWISHAM.—Plans passed by Borough Council: Five houses, Manor Lane, for Messrs. W. J. Scudamore, Ltd.; 168 houses, L.C.C. estate, for Mr. J. G. Stephenson; 12 houses, Fordmill Road, for Mr. H. Mitchell; 15 houses, Fossil Road, for Mr. A. Marsh.

LOWESTOFT.—Plans passed by Town Council: Six bungalows, Colville Road, for Mr. W. J. Croft.

MANCHESTER.—Messrs. Oakley and Saunville, architects, 66, King Street, Manchester, have in hand preparation of plans for alterations and additions to "Cranlie" Lapwing Lane, Didsbury, and the erection of a glass roof over Beaver Street, for the Manchester Central Packing Warehouses, Ltd.—Messrs. J. Garrard & Sons, Ltd., builders, Swinton, Manchester, are to erect 46 houses on a site in Crosby Road and portion of Burnage Housing Estate.—A revised plan and section of warehouses, Oliver Street, Openshaw, has been approved by the Manchester Corporation for Messrs. J. H. Squires, Ltd., architects, Messrs. Thorpe & Collier, Ltd., 66 Deansgate, Manchester, who also have in hand a new shop front at 141 Cross Street, Gorton, for Messrs. Johnson Bros. (Dyers), Ltd.—Messrs. J. Earnshaw & Son, architects, 42 John Dalton Street, Manchester, are preparing plans for the erection of a parsonage on a site, Hall Street and Church Street, Gorton, for the trustees of Brookfield Church.—The Manchester and Salford Equitable Co-operative Society, Downing Street, Manchester, propose to make alterations and extensions to their branch at Hyde Road and Woodlands Avenue, Gorton. Plans and work to be carried out by their own building staff.

NELSON.—It is reported that Messrs. Mark Nutter, Ltd., cotton spinners, Parkfield Mills, are proposing to erect a new mill for the manufacture of artificial silk.

NEW MALDEN.—Plans passed by Maldens & Coombe U.D.C.; 4 houses, South Lane, for Mr. R. Thomas; extension of factory, Chestnut Grove, for Douglas Hosiery Co.—Progress is reported with the Council's town planning scheme.—The Surrey County Council are to be urged to provide a secondary school in the district.

NEWPORT (I.O.W.).—The Town Council are seeking a loan of £8,760 for the erection of 18 houses on the Trafalgar Estate.

NEWPORT (MON).—Plans passed by Town Council: 10 houses, Queen's Crescent, for Messrs. Page & Lawrence.—The Borough Architect has been instructed to prepare plans for police quarters.—The Board of Education have agreed to the proposed erection of a central school at Hatherleigh.—The Municipal Secondary School is to be enlarged.

NOTTS.—The Standing Joint Committee have allocated £2,000 for the erection of police houses.

OXFORD.—The City Engineer has prepared plans for the lay-out of sites at Gypsy Lane and Meadow Lane, to cost about £25,000.—Eight subsidy houses are to be built in Victoria Road and Fairacres Road.

PLYMOUTH.—Electricity is to be provided at the North Prospect housing estate at a cost of £36,500.—The Ministry of Health have acquiesced in the sale of sites at North Prospect for a church and a chapel.—The Ministry of Health have sanctioned a loan of £43,500 for the erection of Coburg Street school.—The Housing Committee has decided to invite tenders for the erection of houses in brick or concrete in various numbers up to the number of 800.—Plans passed: Six houses, West Down Road, for Mr. W. H. Heath.

POYNTON (CHESHIRE).—The Church Council are negotiating for the purchase of land for the erection of a parish hall.

SCHOOL AYCLIFFE.—Durham County Council propose the purchase of two farms of 343 acres as a site for an institution for mental defectives.

SEDGEFIELD.—A house is to be erected at the Durham county asylum for the assistant medical officer at a cost of £2,100.

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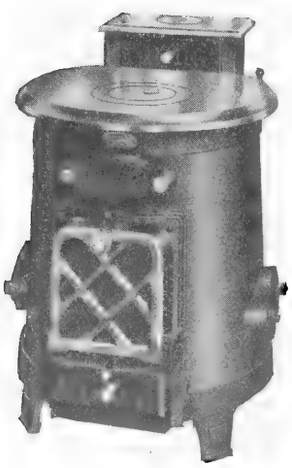

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SHEFFIELD.—The electricity supply is to be developed at a cost of £45,000.—Plans passed: 10 houses, 12 shops and two warehouses, Stubbin Lane, for Mr. S. Taylor; house and public house; Sheffield Lane, for Tadcaster Brewery Co., Ltd.—It was reported that the Estates Committee recommended the City Council to accept the tender of Messrs. Henry Boot & Sons (London), Ltd., for 1,000 concrete houses, at the sum of £461,970.

WAKEFIELD.—The Town Council proposes the erection of 20 experimental houses at a cost of £8,696.—A scheme has been prepared for the erection of 60 houses.

WARRINGTON.—The Town Council have had tenders for the erection of 54 houses on the Reynolds Street site and referred them to the Surveyor for report.

WARWICK.—The Town Council are to erect 32 houses.

WOKING.—The Surveyor has been instructed to prepare sketch plans for houses in blocks and flats.—The Surveyor has been instructed to proceed with the bridge at Watersplash as soon as possible.—Plans passed: Church, White Rose Lane, for Rev. W. Plummer; church and hospital in connection with St. Peter's Home, Maybury Hill, for trustees.

"The Studio" of November.

"The Studio." We see this journal month by month and are pleased to think that there is a periodical which deals with the subject of contemporary art in a broadminded spirit. The November issue contains illustrations that represent almost every school of thought. The chief attraction is a very well written and illustrated article on P. C. Puvis de Chavannes.

Those who have seen this artist's mural paintings will recall the wonderful colourings that they contain. "He adopted colour-schemes limited to a comparatively small range of tones and thereby obtained more striking effects." Seen illustrated in this issue in black and white the mural paintings represent only a fraction of their real beauty. The drawing is almost perfect but perhaps a little too realistic; this effect is greatly diminished when the paintings are seen with their splendid colour.

"A Norwegian Painter of the early Nineteenth Century, influenced by Turner," is the title of a short review of the work of Peder Balke. A full page illustration entitled "Fog" is certainly a clever representation of this dread visitor. The atmospheric effect of fog above the sea is quite masterly in its suggestion.

"Austrian Bookbindings." Whilst it is useful to see what contemporary artists and craftsmen are doing in all branches of the Arts and Crafts we should not classify the illustrations shown as representing anything outside the scope of anyone at home.

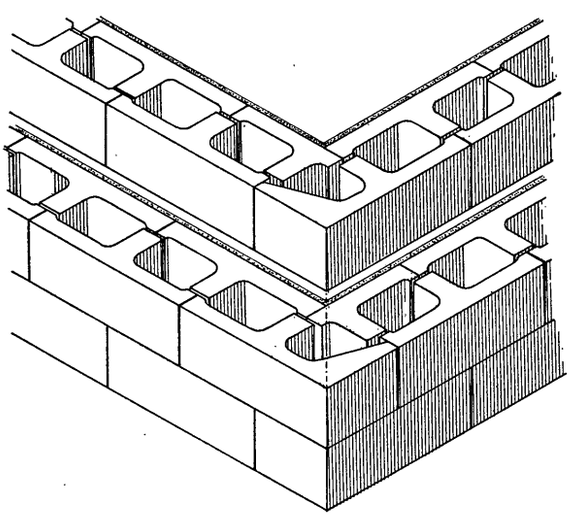
"Some Notes on the Original Mezzotints of Mr. R. C. Peter." Technically the mezzotints may be very good examples of the art but artistically we do not appreciate the methods of representing the different details. The Storm Wave—everything is spotty and small masses with curved contours have been employed for every effect. "Dawn." We have a central figure treated in a more simple manner, the result being that there is more repose in the composition though the curly hair effects have even travelled down to the muscles of the body of the male figure on the right. "The Comet" is also too spotty to be pleasing. "Two Canadian Painters." Some little while since we gave a notice of an exhibition of pictures by Messrs. Norwell and Beament and we are glad that "The Studio" has dealt kindly with these artists, a treatment they richly deserve. The illustrations included in the article are certainly some of the best pictures shown at the exhibition. "Galinean'Autumn," by G. N. Norwell, was quite exceptionally good. The art of Lepinsky, A. H. Knighton Hammond; Romilly Feddon are also the subjects of illustrated articles, which, with other data of an extremely interesting nature, completes what should be a very good issue.

New Catalogue.

We have received a very comprehensive catalogue from Messrs. John Bolding & Sons, Ltd., Grosvenor Works, Davies Street, London, W. The firm has maintained a very high-class reputation as sanitary experts and manufacturers for over a century. The range of fittings manufactured and illustrated in the catalogue includes a list far too extensive to give in detail in this short notice, but the catalogue is bound in a fine red cloth binding and should be placed in every architect's reference bookcase. Many novelties have been introduced of late years that contribute to the general public comfort in matters relative to sanitation and toilet requirements. This age can truthfully be named the age of "Detail Perfection." Messrs. John Bolding & Sons, Ltd., have realised that a name and reputation can be greatly assisted by devoting every care to the production of useful adjuncts to the main fittings. Architects and clients more and more prefer to specify with one firm for the whole equipment, and not infrequently big contracts are secured through the attractiveness of small details. The illustrations devoted to baths, etc., include every conceivable shape, and it would be difficult to imagine a client being unable to find perfect satisfaction in the styles and patterns included. On the question of quality we can only write in a favourable manner. Most of us have realised that it pays in the long run to purchase fittings that are of guaranteed quality. In matters connected with sanitary and toilet fittings quality should be a first consideration. Nothing is more inconvenient than the dislocation of this department in our domestic life, and therefore a due regard to the question of quality in the first instance will prove a lasting benefit. The firm has always been associated with the use of the very best materials, and it will be found that Messrs. John Bolding & Sons, Ltd., prices are very reasonable ones for goods of first class quality.

Trade Note.

The works of Messrs. Fyfe-Stone, Ltd., which have been erected at Coltmuir Quarry, Bishopbriggs, Glasgow, for the production of building materials were formally opened on October 20, 1924, by ex-Baillie G. Morton. The company will manufacture all forms of concrete building products from breeze partition slabs to ornamental pre-cast stone. It is intended to specialise in the production of standardised units of synthetic stone that will sell at a figure equal to the price of brick-work. This material is essentially synthetic, as the aggregate consists solely of freestone chivers that have been broken and graded from sand up to ½ in. cubes. Correct proportions of each grade are determined in order to ensure that when mixed with water and cement and pressed it will reform into as close or dense a mass as in its original state. The works are, we understand, the largest and most up-to-date of



PATENT "T" BLOCKS FORMING A DOUBLE BLOCK CONTINUOUS CAVITY WALL.

their kind in the country. The main shop contains a battery of machines specially designed to produce slabs of various thicknesses and the special Fyfe patent "T" or lugged blocks illustrated above. These machines apply heavy pressure to a quaky wet mixture of aggregate, which combination results in an exceedingly close grained impervious stone. After the opening ceremony it was demonstrated to a large gathering of representatives connected with the building industry how the stones are faced with crushed granite, marble, Dorset pebbles or coloured sands, under the heavy pressure in the one operation. One portion of the plant is capable of turning out 2,400 units per shift of eight hours, and it is estimated the production could be increased to about 1½ millions per annum, or sufficient to build almost 3,000 Government type houses. Mr. Peter Fyfe, the late Director of Housing for Glasgow, and chairman of the company's directors, in explaining the aims of the new company, said Glasgow required at least 52,000 new houses now, and they had little hope of obtaining anything like that number during the next seven years. Meantime, the population was growing at the rate of 10,000 per annum, so that any system which would give houses quickly and at a more moderate cost than at present would be welcomed. Fyfe-stone could be built up in half the time required for brick-work, and he estimated would cost less. By building with these slabs and blocks upkeep charges were reduced to a minimum, building costs were reduced and construction was speeded up.

VOL. CXII.—2919. THE ARCHITECT NOVEMBER 28, 1924

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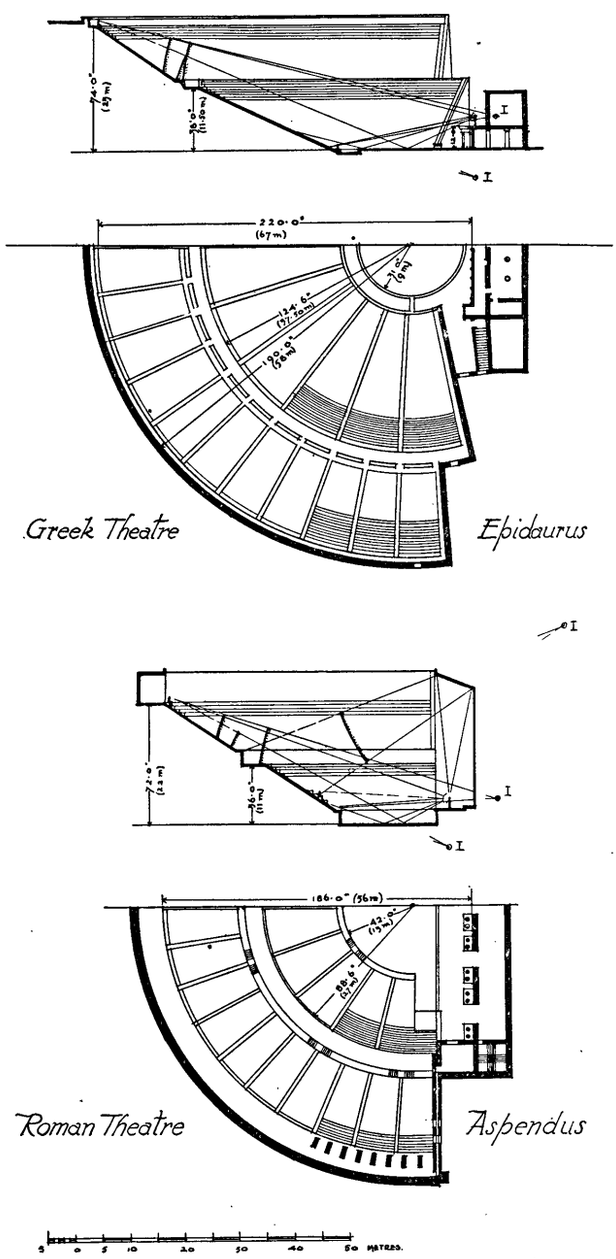
Acoustics in Building.

There is probably no branch of knowledge which has been more neglected than that of the acoustics of buildings. A majority of our public buildings containing accommodation used for public speaking



are badly designed for their immediate and primary use. Mr. Hope Bagenal has given much time and thought to the subject and his paper at the Institute contains a large amount of useful information explained in very simple terms.

It is natural that his analysis should be largely concerned with the acoustics of the ancient theatres of Greece and Rome designed for the accommodation of immense audiences.

Mr. Bagenal attributes the excellence of the Greek theatre from an acoustical point of view to the narrow stage employed and backed by the high skene wall behind which formed a reflector, while the height of the stage above the circular paved orchestra gave another reflecting surface for sound. The height of the stage gave a wide impact to waves of sound passing between performers and the audience at a wide angle, whereas the same waves, if passing over the heads of an audience at a narrow angle, are readily absorbed. The great width of the theatres also helped the uninterrupted passage of sound in every direction. As the theatres were unroofed, resonance was almost as short as in the open air, and the audiences frequently amounting to 16,000 to 20,000 were often seated at distances of 200 feet from the performers, all possible reinforcement of sound was necessary. This reinforcement was, Mr. Bagenal considers, provided by the wooden floor of the stage and wooden panels between stone columns on the supporting wall of the stage. In the Roman theatres similar principles were less perfectly applied.

These points have a bearing on modern design; a hard rear wall about 10 feet behind a speaker will make a considerable difference to his audibility, while the usefulness of a stage floor as a reflector makes the difference between the opera house and concert room. A concert room would be improved by a clear hard floor space round the solo performers and wood surfaces may be advantageously used as resonators.

The wood surface of a platform floor should be joined to that of its front, while the same principle could be applied to the panelling behind the platform.

Mr. Bagenal considers that *écheia,* or closed vessels of air in the form of vases, were placed near the stage to increase resonance, a point which is held in dispute. As Mr. Bagenal points out, the mediæval church was in almost all respects the antithesis of the Greek theatre, the enclosing walls acting as reflectors to sound. The Greek theatre was an instrument low and distinct, the church loud and incoherent. Intoning was rendered inevitable by the duration of each syllable. The best compromise now that preaching is once more an element to be considered is the placing of the pulpit with a wall behind it and a reflector above at an angle of 45°.

Wren's advice on church construction is well known and clearly expressed in his Parentalia, and expresses now, as it did then, in the clearest manner the best way to construct a church of moderate size in which preaching is to be the dominant feature. We have always regretted that those engaged on the design of dissenting churches should not have closely followed Wren's precedent instead of the semi-mediæval ones which so often find favour.

In speaking of concert rooms Mr. Bagenal points

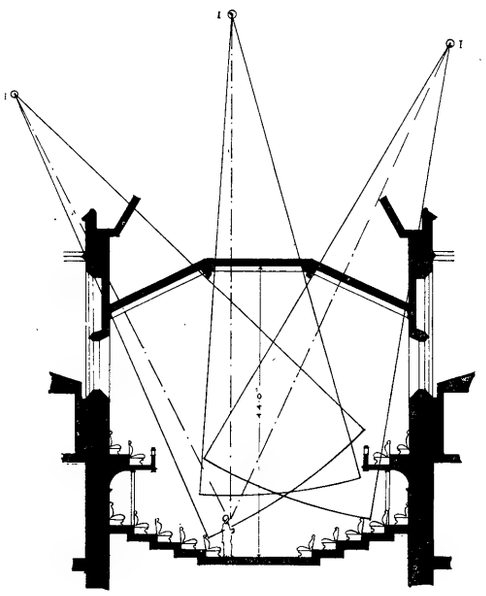
out that a reverberation of at least two or three seconds is necessary, and choral music for that reason sounds better in a church of moderate dimensions than in a packed concert room. Reverberation varies directly with volume, the larger the room the longer the reverberation, and inversely, with the absorbing power of the room which tends to shorten the reverberation. The greatest absorbent is the auditory, while carpets and drapery also absorb. The necessary factors can be calculated by tables, an audience of 2,000 people producing 9,400 units of absorption and a reverberation of two seconds, a minimum air volume of 376,000 cubic feet, which means that 376,000 cubic feet is on the small size for an audience of 2,000.

A large volume of air also demands a certain reverberation from a musical point of view, otherwise deadness is complained of by the performers. Where for reasons of cost the air volume has to be reduced, wood resonating surfaces must be introduced near the sources of sound. The floor of the platform should have a 6 inch air space under it which will reinforce the notes of instruments in contact with it and the joists should run towards the proscenium, the air space between them communicating with the auditorium.

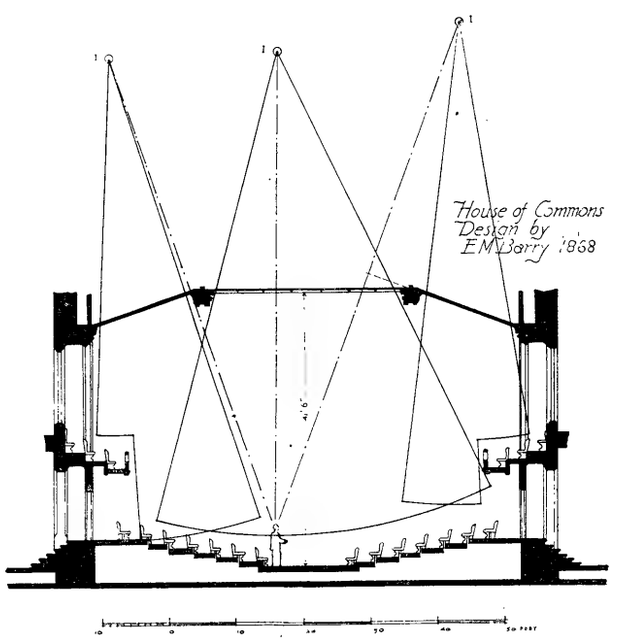
Mr. Bagenal recommends for a large concert hall a fan-shaped room with a part of the splay to right and left of the platform arched over as a deep proscenium arch. One advantage of such a form is that the width of the orchestra space is restricted and too great a discrepancy between the arrival of sounds from various instruments is avoided. The reflection of sounds from the rear walls of the auditorium can be prevented by a frieze of acoustic felt or slag wool.

Mr. Bagenal dealt at length with the acoustical qualities of the House of Commons, where the difficulties encountered led to the lowering of the ceiling of the original design, and where the centred side slopes produce excellent results. Professor Tyndal, in his evidence in 1869, said that he could not help thinking that draperies had much influence in quenching the reflected sounds and destroying after sound, and in this he foreshadowed the Sabine theory of reverberation.

A very useful analysis of the effect of different forms of ceiling from the standpoint of speaking or choral uses, and some very useful notes on materials from an acoustical standpoint, render Mr. Bagenal's paper a useful introduction to the study of acoustics in building. The subject is a complicated and scientific one, but in a short space of time it should be possible, by the use of easily understood formulæ, to eliminate the architectural production of halls with bad acoustic properties if not to render their building an act of "culpable negligence" on the part of the architect.



Existing House of Commons
Cross Section



Our Illustrations.

MERTON TOWER, HIGH STREET, AND OLD PALACE, ROSE PLACE, OXFORD. From Pencil and Wash Drawings by G. H. Cook.

THE SPINNEY, CUDDINGTON, SURREY. F. Leonard Poole, Architect.

UNION BUILDINGS, PRETORIA: THE COUNCIL CHAMBER AND THE PRIME MINISTER'S ROOM. Herbert Baker, A.R.A., Architect.

Notes and Comments.

Colour and Heat.

An American contemporary has an interesting article on the effect of colour on heat, which is said to be often overlooked, though almost everyone knows that dark colours absorb heat rays to a much greater extent than light ones. The point becomes important in the case of carriers for food, which should be painted in white or light colours.

Experiments have been carried out by enclosing liquids in specially constructed containers, the outsides of which were painted in different colours. At the end of thirty minutes black cans could not be handled because of their high temperature (140° F.); white cans could be handled comfortably. The liquid was in each case insulated by a cork and air space, but it was found that the transmission of heat through it was rapid. The results point emphatically to the advisability of using white or very light colours in the case of refrigerators or ships.

The Clydebank Tenants.

The difficult situation created by the three years' rent strike which has taken place on the Clyde still continues. Originally arising out of the careless wording of a clause in the Rent Restriction Acts, now amended, it has been seized by the extreme agitators as a means of obtaining forcible possession of the property of others without payment. The Provost of the city has advised defaulting tenants to meet their obligations, and the Factors Association are combining to carry out evictions, but already many of those turned out have reoccupied other houses. As much of the property in question belongs to quite poor people, an intolerable situation has been created and one which cannot be allowed to go on. For it becomes a national difficulty when any large body of men anywhere defy the law, as action of this nature is imitated, to the detriment of the community. If in a great city like London lawlessness was left unpunished for a few hours, the damage done would be incalculable; and it is therefore to be hoped that the authorities will find a way of dealing very drastically with the situation which has arisen in Glasgow.

The Present Cost of Houses.

Private builders applying to the Manchester Corporation Housing Committee for subsidy certificates for 250 houses have been informed that 239 of the total exceeded a reasonable price, which has now been fixed by the Housing Committee at £700 per house. They are guided by a clause in the Housing Act which states that they must be satisfied that the houses could not be built without the subsidy of £100. It seems to us that in fixing the limit of £700 the Housing Committee have been very liberal, as, even making allowance for the recent rises in prices, we should have thought that a house could be built almost anywhere for an inclusive figure of £600. But we hope that other authorities will follow the example of Manchester in definitely stating a limit of reasonable cost, as it is largely through such action that prices will again show a tendency to fall.

Houses at Half Price.

The Royal Arsenal Co-operative Society, Ltd., are considering the purchase of 1,034 houses and 212 flats, together with 90 acres of freehold land, for the sum of £375,000. The total cost of the estate to the Government was £808,000 and the rents paid to the Government amount to £48,000 a year. At the lower figure this should prove a very good investment for the Co-operative Society, who will acquire the Well Hall Estate on very advantageous terms. The cost to the Society works out, according to statements made, at considerably less than half the present costs of building, but we should have thought this was an overstatement.

It is satisfactory to know that one of the big war undertakings can be disposed of even by writing off so large a sum. In other cases, notably at Gretna, in the nature of things, a position which was eminently suitable for war purposes is not a permanently good one, and this fact ought to have been recognised during the war, as Gretna was built to last and not for its temporary purpose.

The Lodger Difficulty.

After pursuing a deliberate policy of trying to prevent tenants of Council housing from taking lodgers to make ends meet, the L.C.C. have decided to provide accommodation for such lodgers in the new tenements they are building in Staple Street, Southwark. An undertaking has to be given that the "lodger rooms" must be let to single persons and not to families, and on these conditions the experiment has been endorsed by a large majority. The change is one which will probably justify itself from a point of view of finance, as the single lodger will usually be able to afford a greater proportionate payment than the space he occupies costs, and so help to bridge over the problem of the economic rent. It will also tend to put an end to the numerous cases of evasion of terms which have taken place in the past, but in another sense it is providing people not only with houses but with a means of making money. We may also be sure that the landlord on the spot will usually make certain of his rent, but with our tangle of laws about alternative accommodation, can we be certain that the householder will be free to get rid of his lodger?

Bricklaying.

We give elsewhere a communication from Sir Charles Ruthen in which he points out that opinions as to the greater output of bricklayers in Holland have been attributed to him which are incorrect, as they overlook the difference between the sizes and weights of the bricks used in the two countries, while he ends with a panegyric on the subject of the British workman. This is all very well in its way, but an evasion of facts. We doubt, in the first place, whether it would take noticeably longer to lay English bricks than those of a slightly smaller size, as an English brick is easily handled and is not unduly heavy. But apart from any question of comparison, Sir Charles Ruthen must know that the bricklayer's average output in this country at the present time is unduly and absurdly low, and it is hardly the season to be paying him compliments. An average of 800 to 1,000 bricks a day ought to be reached, and if it were the building industry would be in a far better position than it now is.

A contemporary states that "In the presence of the officials of the Sheffield Builders' Exchange and the Rotherham Master Builders' Association, Mr. Chris. Hull, foreman of the housing scheme at Treeton, near Sheffield, yesterday created what is believed to be a world's record, and at the same time won a wager of £10 to 10d., by laying 809 bricks in one hour. This feat compares strikingly with the average bricklayer's output—between 400 and 700 per day. Standard bricks were used, the task chosen being the erection of a 9 inch outside house wall."

Comment is unnecessary, although this is an exceptional feat.

The Architecture Club.

The second annual general meeting of members of the club was held at the Royal Institute of British Architects on November 18, the President, Mr. J. C. Squire, in the chair. In presenting the report of the Executive Committee and statement of accounts for the year ending May 31 last, the chairman stated that, apart from the club's exhibition at Grosvenor House in the spring, they had had the pleasure of co-operating with the Royal Institute in organising the representative exhibition of British architecture at the British Empire Exhibition, and also of assisting the Institute in formulating a protest against the St. Paul's Bridge project. These matters might be taken as evidence of the happy relations that had always subsisted between the club and the premier body of British architects, by whose courtesy, indeed, they were meeting in that hall. Mr. Squire referred to the visit of Her Majesty the Queen to the club's exhibition, to the excellent and stimulating address of the Marquis Curzon at the opening ceremony, and to the thoughtful and sympathetic speech of the ex-Premier, Mr. Ramsay Macdonald, at the last dinner of the club in May. A considerable part of the report dealt in detail with the work of the sub-committees. The financial statement showed that a considerable loss had been sustained through the exhibition, but the deficit, the chairman explained, had since been cleared off. The report and accounts were unanimously adopted.

Messrs. Arthur J. Davis, Nathaniel Lloyd, Charles Marriott and Clough Williams-Ellis were elected to fill vacancies on the Executive Committee caused by the retirement, under Rule VII, of Messrs. Oswald Barron, E. Vincent Harris, Ralph Knott and Professor Hubert Worthington. Votes of thanks to the retiring members of the Executive, the retiring treasurer, Mr. H. Austen Hall, who is succeeded by Mr. Darcy Braddell, also to the R.I.B.A., the chairman and the secretary, concluded the proceedings.

TYNEMOUTH.—Plans prepared by the housing architect for 12 blocks, each containing four maisonnettes, have been provisionally approved.—The provision of a new library building is under consideration.—Plans passed: 6 houses, Blanchland Terrace, for Messrs. Brannen Bros.; rebuilding 66 and 68 Bedford Street, for Mr. W. Stockdale; 15 houses, Lilburn Street, for Mr. A. K. Tasker; 13 houses, Lilburn Street, for Mr. I. Smith; police station, Albert Edward Dock, for Tyne Improvement Commissioners.

Building Trade Notes.

By H. Bryant Newbold, M.S.A., A.I.Struct.E.

Old Methods and Materials.

It is refreshing to learn that in all this search after new methods the established claims of the old are not to be overlooked. For it has yet to be proved that the usefulness of bricks for house building has been surpassed. Bricks have sufficed for many thousands of years and will continue to do so. With bricks, as bricks, there is no fault to find. The fault lies in the persons concerned with bricks. To dig clay to burn it, to transport and to build with it necessitates no very skilled knowledge nor craftsmanship. There is nothing in any of these matters which might not be learned in six months by any person of average physique and intelligence.

But saddle the subject with a master man, a middle man and a working man, give each a union to restrict their individuality, and above all let all these unions meet as often as possible to talk instead of to work and the poor brick is lost sight of. Talk becomes the thing of the moment, not bricks.

In such circumstances any method of making bricks of equal suitability but with greater speed, and more economically, and if possible without the aid of federation, union or committee, should any such method be discovered, a very real solution would lie therein.

New Process of Brick Making.

At the present time there is a new process for the manufacture of bricks in use in France and Belgium by several large concerns among which are the Mines de Lens, the Glaceries et Verriers d'Aniche, Establissements de Travaux, Publics, Paul Frot a Meux and others. An agency has also been set up in England and already two plants have been ordered. Whereas in the use of shale for bricks there is nothing new to us in this country, the new process should not be confused with this, for it is not the same, but entirely new.

By means of this new process it is possible to make bricks and tiles from materials which up to the present have been useless for such manufacture, and it can be safely asserted that the process constitutes a very great improvement indeed in the manufacture of bricks and tiles as much from the point of view of economy as from the finish and quality of the articles produced. But of far more importance to us is the fact that one plant can produce from 3,500 to 4,800 bricks an hour. The tremendous effect of this upon the industry will be realised at once; for it amounts to a revolution. Further, the same process may be used for the production of slag bricks, fire-proof bricks, paving tiles in clay or cement and similar products.

It is the only known process by which bricks and other goods can be manufactured from poor earth hitherto rejected as entirely unsuitable. By this process the products are hard and have a perfect ring; they have neither notch nor crack and they fulfil all the guarantees, however severe, demanded with regard to proof against frost, porosity and resistance to chipping; further, they have a resistance to compression never before attained by any other known process.

The labour needed in the new process as compared with that required for the old wet process is as 7 : 22 and a comparison of the approximate cost per thousand is as 13 : 22.

Method of Manufacture.—The clay arrives from the quarry on trucks which are unloaded into the distributor. The distributor feeds continually and regularly to disintegrator, which immediately cuts up the clay into thin layers and small pieces to facilitate drying. An elevator then carries the shredded clay to the feeding hopper of the drying tube which is fitted at the end with a grinder. This tube runs on rollers with a very smooth action. And a powerful ventilator draws the hot air through the tube from the boiler and the compensating fire box. After 15 or 20 minutes the dried and finely granulated clay comes out at the other end of the drying tube and falls into a spare receiver, whence a distributor passes it on to an elevator which conveys the clay particles to an apparatus called the moistening device.

This granulating, drying and moistening part of the process is a particular feature which should be especially noted as it is upon it that the superiority of the finished product in a large measure depends.

For bricks of very poor clay or mould the moistening is brought up to 6 to 6½ per cent. of water. A mixture of rich clay may contain from 6 to 8 per cent. of water for bricks and silico-aluminous products or aluminous refractory products.

According to the kind of clay, sand or slag 10 to 50 per cent. of sand or 10 to 25 per cent. of slag may be introduced for clarifying.

The moistening is easily regulated to within ½ per cent., and the moistening device is erected on supporting frames in such a way that the moistened material ready for compression can fall directly, through the openings in the lower platform into the hopper for the brick presser.

A point of exceptional interest is that the same plant may be used for the simultaneous manufacture of bricks and tiles by the addition of an extra ball grinder and elevator.

The Presses.—These brick-presses are worked mechanically and with hydraulic control.

After baking, the bricks have a perfect ring and 60 per cent. of the production can be used as facing bricks.

Contrary to what would be supposed from a superficial examination, the bricks are of a lesser density than those obtained by drawing and re-pressing and the smoothness of the surface does not in any way interfere with the adhesion of the mortar.

Advantages of the New Process.

1. Costs more favourable.
2. Installation less costly and less extensive.
3. Work more constant and more regular, not depending on the seasons and allowing of a considerable saving in staff. Better facilities for utilising this staff, and consequently greater possibilities as regards payment of it, thus stabilising the whole position and giving greater dignity to the whole enterprise.

These considerations are particularly appreciable at this juncture when the demands of workmen are particularly exacting.

4. The possibility of manufacturing with raw materials up to the present considered as useless for manufacture by other processes.

Porosity.—The porosity of the products of the new process is such that it does not allow water to get into them and consequently they hold the mortar.

Resistance to Pressure.—By the new process the bricks have roughly 50 per cent. more resistance to pressure than by the "wet" process.

Resistance to Chipping.—Owing to the flawless composition of the substance of the bricks they have a greater resistance than other processes. In spite of this, the brick breaks off cleanly and very easily under the trowel.

Resistance to Frost.—Bricks made by the new process give greater security against frost than those made by any other system.

Adherence of the Mortar.—The smoothness of the surfaces does not in any way interfere with the adherence of the mortar.

Firing.—Bricks made by the new process, being of a perfect composition throughout and well compressed, come out better fired than bricks made by any other process.

Contraction.—By the new process the bricks, possessing a minimum amount of dampness, contract only a negligible amount on being fired.

Commercial Value.—First of all it must be taken into account that by reason of the regularity of manufacture in the products obtained by the new process 80 per cent. at least of the production are sold as facing bricks.

Fuller details will be sent to anyone desiring them.

Book Notes.

HOUSE ON HARRINGTON SOUND, SMITH'S PARISH.

Bermuda Houses.

"Bermuda Houses." By John S. Humphreys, A.I.A. (Boston, Mass.: Marshall Jones Co.)

At a first survey there would not seem to be much that is worthy of notice in the illustrations given of the older houses of Bermuda. Few of them show definite signs of being the outcome of an architect's skill, and all are simple and almost bare in character. But on further examination one feels that anything else would probably be out of place in their environment, a supreme test of fitness.

CHIMNEY ON HOUSE, HARRINGTON SOUND, SMITH'S PARISH.

The materials employed are a very soft stone, which cannot be moulded except in the roughest manner, and cedar woodwork. A peculiarity is that with a sub-tropical climate the verandah is an unusual feature, while chimneys are prominent and large. Roofs are covered with sawn slabs of local stone cemented and universally whitewashed. As no springs or rivers exist on the island, these roofs are kept immaculately clean and used as a collecting ground for rain-water. As the island is sometimes swept by hurricanes, eaves are small in projection and simple in character. The most prominent feature are the chimneys, rectangular in shape, with their longer axis in line with the length of the house and not placed transversely to it. These chimneys are externally battened at a slight steep slope, the fire recessed back with no projecting hearth, and the latter is frequently raised a couple of feet or more from the floor level.

The larger number of the houses shown are of one storey in height, those built on rising or irregular ground having rooms below them unconnected with the main storey, and these were frequently used in former times as slave quarters. The main storey was reached by steps, widest at the bottom and enclosed by walls, which are locally termed "welcoming arms." Windows are almost universally fitted with jalousies, hinged at the top and propped up by a stay. Simple curved gable ends are frequent, but Bermuda's traditions are purely English, and French, Spanish or Dutch precedent has left no trace on its architectural development, the conditions governing which are that it is the direct outcome of the planter's wants and the local materials used by craftsmen unused to any other than the simplest forms of building.

Butteries for the preservation of food usually took the form of detached buildings with steep roofs and small openings for purposes of through ventilation. A common feature in a house was a small semi-octagonal or square room forming a projection at the entrance. In this room was placed a table with a bell, and here the visitor waited, having announced his presence by ringing.

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FRONT OF "CAMERON HOUSE," WARWICK. Built about 1820.

From this interesting work we give three illustrations: the front of Cameron House, Warwick, the porch of which is the only example of what would be called external detail in the usual sense of the word, a house on Harrington Sound showing a typical curved gable, and a chimney from the same house which illustrates this very typical feature. The book shows many picturesque gateways, which take the form of simple wooden gates between rude piers of stone set in rough walls.

The book is similar to that which might be produced on the work of many of our country districts where we feel that simple and unambitious buildings almost without architectural note are nevertheless entirely pleasing in their collective effects. Such buildings have the great attraction of seeming to sink into the landscapes of which they form a feature, an effect we often miss in the more ambitious structures of modern times. It is useful to have such records made before the decay and changes brought by time obliterate them.

"Some Architectural Problems of To-day." by C. H. Reilly. 6s. net. University Press of Liverpool.

Reading the opening chapter of Mr. Reilly's book entitled "Some Architectural Problems of To-day," we are reminded of a statement made by a very eminent journalist and editor—namely, "That of all the criminals who have ever lived, the architect at times is the greatest," Mr. Reilly writes that "No man builds to himself alone. His building is there, if in London, for some ninety years or more. It may even descend to our great-great-grand-children to show then what sort of animals we were." When we pass through our London streets, those who have any real sense of things beautiful must grieve over the buildings that follow each other, one uglier than the other, all out of harmony with each other. Whilst there can be no doubt about the beauties of the Bank of England, we do think it is necessary to feel fear with regard to its future. The new building scheme is in such very capable hands. The reason why nobody writes to the papers about the vulgar and pretentious buildings that are erected from time to time is because very frequently business interests bar one from a definite expression of one's opinion in the Press. The journalistic editors also generally consign such letters to their proper place. We do not agree with the author on his remarks about the new Selfridge buildings. We are gratified to think that store owners should aim at the erection of dignified façades. Most of our streets consist of stores and shops following one another for miles. In the past the lack of architectural appreciation on the part of the owners of such premises has been responsible for the present ugly character of our main traffic avenues. If the whole of the London shops were of standard and quality of Selfridge's Building, we could be justly proud of our city. The Nurse Cavell monument is different from the ordinary type to which we are accustomed, but because it is massive does not necessarily infer that it is inspired by German artistic expression.

We pass on from chapter one, which can be best described as a chapter of unreasonable grumbles, to chapter two, which starts with a condemnation of New Scotland Yard. The War Office does not please the author, the Selfridge building is also treated very badly by him, and now Norman Shaw receives a portion of his unfavourable comments. Somerset House pleases Mr. Reilly, whom we should be inclined to consider a safe man; he has praised the work of Sir Edwin L. Lutyens and likes Somerset House. If we were to examine Somerset House from the point of usefulness, we should discover that it has long passed into the category of obsolete buildings. It is used because it is there, but in no sense of the word can it be described as a useful building within the scope of modern requirements, and very soon it will only be retained because of its external beauty. But considering the value of the site it occupies, we cannot imagine that future generations will be able to even afford the luxury of retaining it as a thing of beauty. It seems to us quite unfair to compare Somerset House and Selfridge's.

We quite agree that it is somewhat odd that with the Banqueting Hall so near to the modern Government offices in Whitehall, its splendid influence should not have been more effectively felt by those responsible for these later buildings, though we have always liked the Woods and Forests elevation.

On page 12, our critic of buildings refers to "the great clounms," this is, of course, a printer's error, but how many of the unfortunate façades of the past could also be described as the errors of clients and not the crimes of architects.

King William Street has unfortunate examples, but there are also some very clever designs in the street. Messrs. Ashley and Winton Newman are responsible for a very effective and pleasing design. The London Assurance also has some good points, and when remembering its site and purpose, we should classify it as quite a good solution of the problem set before the architects.

We are not sure whether tenement houses and flats are such a great blessing to live in. "Our little boxes of bricks," representing an Englishman's castle, certainly provides him with a little more privacy than is possible in a block of flats. We have not the laws in this country that make for a truly comfortable existence in flats. We need regulations relative to the control of fireplaces, flues and chimneys, regulations that are enforced, and reduce the fire risks to an absolute minimum. We have no con-

trolling power over noise, our neighbour above can thump on a piano until our nerves are fit to break, whereas in countries abroad, where no " little boxes of bricks " exist, but where the whole community resides in flats, regulations exist which prevent anybody from inflicting their special pleasures upon their neighbours in an agressive and disturbing manner.

With regard to our railway stations Americans are too prone to criticise. We never imagined that our posters were part of our railway stations. American railway stations possess no posters; according to the author, they are in themselves fine architectural schemes. The most refined architecture will not inform the people where to spend a joyful holiday. Our railway companies produce to-day some of the most artistic posters in the world, it is quite unnecessary to gibe at the belated reformation, it is sufficient to realise that they have mended their ways in this direction. After all, whilst it is pleasing to have architectural beauty expressed on every occasion, we are not aware that anybody has any wish to linger over the beauties of a railway station. If parties were being conducted by a guide around Victoria Station in the same way as they are conducted round the Tower, Westminster Abbey, or the British Museum, we can only imagine that they would be a great inconvenience to the travelling public. Most people visit a railway station for the purpose of using the railway. Most people are in a hurry when they reach a station, and have little inclination to linger and examine its beauties.

The roofs of Waterloo Station might be described as a hen-roost, though for ourselves, we prefer this mode of roofing construction to the form that existed at Charing Cross and finally collapsed.

The author gives us one really good and useful chapter under the title of " The Emergence of a New Style." There is an ever increasing evidence of the character of the new style, which he describes as one relying on " volume and mass for its effects rather than on surface modelling." The quality of starkness is paramount. Its chief characteristic is a bold massive form, almost devoid of the ornamental trimmings so well beloved in the Victorian and Edwardian times. Finance has played the greatest *rôle* in the creation of this style; architects have been obliged to cut the expenses in connection with ornamental decoration to a fraction, with the result that they have sought to express an ornamental mass by means of the entire building. Adelaide House, London Bridge, in our minds is a better example than Bush House in the Strand, the latter, we understand, will unfortunately never be completed. In Adelaide House, on the other hand, we have a complete unit. This design strikes the new note, it embodies in its very simplicity, a stark dignity, the expression in architecture which we sincerely hope will dominate many of our future designers. H.M.K.

The Himalayas in Indian Art.

" The Himalayas in Indian Art." By E. B. Havell, London. John Murray, 12s. net.

Mr. Havell has written many interesting and vivid works on the wonders of Indian art. In this monograph, which represents the Furlong Bequest Lectures given in 1924 at the School of Oriental Studies, he suggests that the Himalayas have always been the pivot of Indian religious art and that what he calls the Indian order of architecture, the design of Indian temples and the principal figures of Indian iconography, are all focussed in the Himalayas. The book concisely gives the author's theories dealing with the temple builder, sculptor and painter, connecting the artistic traditions of India with Indian daily life and work.

The lake of Manasarova, about 15,500 feet above the sea, was according to Indian ideas the foundations of the whole river system of Asia. The Indus, the Brahmaputra and the Ganges have their sources not far from its shores. In this region Brahma has his throne, and here must dwell Siva and his consort Parvati, watching the interplay of the cosmic forces which make and unmake worlds. The Himalayas are said in the Indian sacred writings to form the centre of the world lotus. Brahma's holy city at Khailasa was the seed vessel of the lotus, the snows of the Himalayas the upturned petals of the flower, and the sub-Himalayan slopes the southern of its four great petals turned down upon the stalk. The author sees in the world pillar decorated by the lotus a form which he traces throughout Indian art and which is a symbol of the Himalayas and in the great temple of Ellara, an attempt to imitate the natural wonders of Khailasa and in the external design of different types of Indian temples a further suggestion of the great mountain range.

Similar ideas and thoughts inspire Indian sculpture and painting, and Mr. Havell is at some pains to expose as a myth the legend of Hellenic influence in the early art of India. Mr. Havell has a knowledge of the intricate mythology of India, of Eastern thought and facts which are living to him and help to interpret forms which to a European are not easily understandable. But he has at least brought to light the wonders and beauties of a branch of æsthetic expression which has been too long overlooked here, and his great fear that European influence and European ignorance may destroy in the art of the East more than can be replaced appears to be amply justified.

Garden City Houses.

" Garden City Houses." By Geoffry Lucas and Arthur Lodge, architects, 7s. 6d. net. Architectural Press.

This book has now passed through three editions; the present volume represents the fourth revision and enlargement. Both authors are noted for their very refined taste in all matters, and especially matters relative to domestic architecture. Mr. Lucas has collected antique furniture for a very long time, and his selections have shown a very marked leaning towards pieces of real artistic and decorative value. As a pen draughtsman he has done some very clever work indeed. We should classify both authors as men exceptionally well suited for the compilation of a volume dealing with the above subject. Many detail working drawings are incorporated in the book with plans and photographs of a goodly selection of different types of architecture.

A Brochure on Batik.

A Brochure on Batik. " How Cinderella was able to go to the Ball." Written and illustrated by Jessie M. King. Published by G. T. Foulis & Co., price 6s. This is a practical treatise on Batik presented under the guise of one of our childhood's most favoured tales. It contains some twenty illustrations, including a number of original colour sketches, showing the effect of various dyeings and the progressive results therefrom, and should be of aid to prospective Batikists in this fascinating as well as useful and decorative art.

The Arlington Gallery, 22 Old Bond Street, W.1.

E. Yarrow Jones is exhibiting a collection of watercolours at the above gallery. One would describe Mr. Jones's work as being impressionistic; he makes use of rectangular forms to express foliage, trees and mountains, which in the past have been drawn in a manner so as to express their own particular individuality. Viewed from some distance these rectangular forms take upon themselves the meanings we have generally associated with such features. We are inclined to suppose that the artist is more concerned with conveying the sense of colour than with rendering a careful drawing. In this direction he has been very successful. Drawing and its correct rendering is almost as difficult to realise as it is to produce. The public, perhaps in a great many cases, are quite unable to appreciate its proper value in a picture, and are satisfied with a sketch which conveys a possible impression of a scene and colouring, even if the drawing is not correct. We must conclude that this condition of affairs exists, otherwise the impressionistic artist would find none to appreciate his efforts. Mr. Yarrow Jones's collection will please a number of people, it is so very varied; some of the pictures are really good and please. Others which we do not like still contain that degree of cleverness that commands our attention.

FULHAM.—Plans passed: new buildings, Townmead Road, for Messrs. Macfarlane, Lang & Co.; new buildings, Townmead Road, for Mitchell Conveyor & Transporter Co.

Cottage at Upton, Berkshire, for J. H. Philps, Esquire.

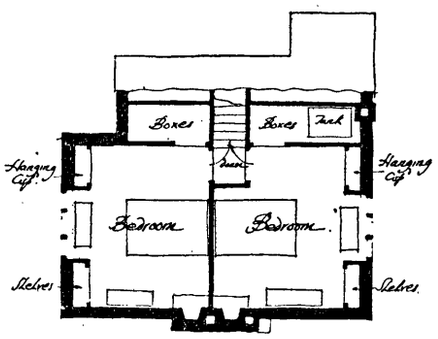
SPENCER H. LAWRENCE, Architect.

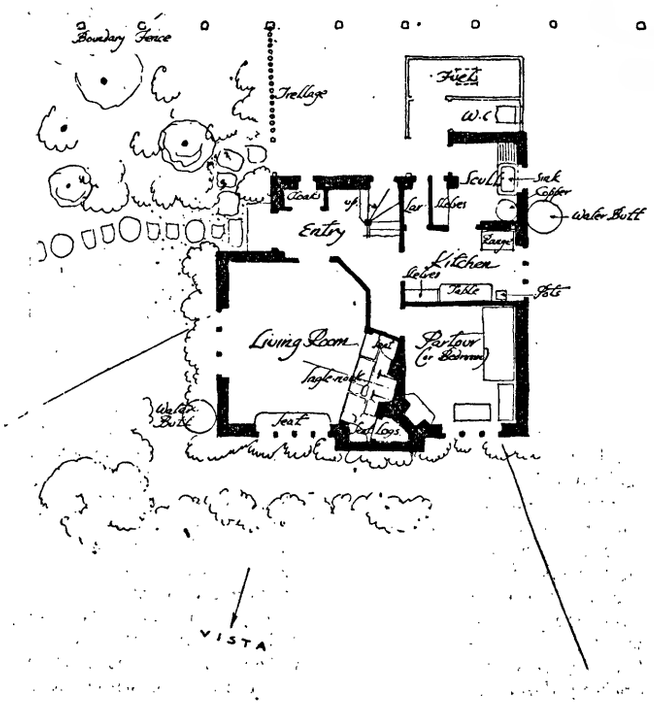
The illustrations accompanying these notes show a small cottage which has been recently erected under the slopes of the Berkshire Downs, not far from Streatley, on a small plot of chalky land, about ¼ acre in extent.

The idea was to fulfil a desire of the client to obtain a small cottage to which he might retire for week-ends and holidays with the idea of economy paramount.

COTTAGE AT UPTON, BERKS. VIEW FROM THE ROAD.

The site was somewhat sheltered from the west and north, but giving a magnificent vista to the south-east down the Vale of White Horse with the Chiltern Hills in the extreme distance. The plan, therefore, centres around the living room, which was so arranged that whilst obtaining the direct benefit of the sun from early morning till sunset, this vista was fully enjoyed from the large and low window, which has a seat internally.





The external walls were of 11-inch hollow construction, twice lime washed a broken white externally; the irregular bases of walls and the large chimney stack were faced with a reddish brick, with mortar joints struck flush.

The windows everywhere were glazed with leaded glazing supplied by Messrs. R. E. Pearce & Co., and both diamonds and squares were used, fixed to solid wood frames. The windows were protected by folding shutters painted an apple green colour.

The roof was covered with plain tiles and as it was imperative to save all rain water, this was therefore collected in two large Sherry butts, one of which is shown in an illustration.

The front door is of two thicknesses of English oak nailed together with large flat-headed wrought iron nails, clenched over on the back, hung by strap hinges to oak frames; the whole sheltered by an oak hood over supported by a natural curved piece of oak as bracket.

Some of the internal doors were also of oak, but the remainder were deal, slightly stained.

Mention might be made here of the oak latch to the living room door, which is a replica of an old local type.

The ground floor was solid concrete, as the subsoil was an exceptionally dry one. The small parlour (or bedroom) was laid with wood boarding direct to the concrete, whilst the entry was paved with 6 by 6 inch red quarry tiles with wide joints. In the living room Granwood patent floor blocks were laid and have proved very successful, notwithstanding the hard wear to which it has been subjected.

VIEW OF DINING ROOM INGLENOOK.

An inglenook with oak posts and beam over, supported on shaped oak brackets, was arranged on the side of this room to take an open fire with dogs and fire basket to burn wood, which is fairly plentiful in the immediate vicinity of the cottage. A small log cupboard adjoins the fireplace. The cooking arrangements consists of a small coal range supplemented by oil cookers.

All internal walls, with the exception of the kitchen and scullery, etc., were plastered, and the final setting coat was finished with a cross-grained wood float, giving a pleasing texture.

A well was sunk adjoining the cottage and as water was found at a depth of 38 feet it necessitated the use of a force pump, which was arranged on the external wall near the larder, and easily accessible from the back door, to deliver water into two tanks in the roof space.

This gave an opportunity of installing a water carriage system of drainage, the disposal of which was by means of

a septic tank and irrigation which has proved quite successful owing to the slope and porosity of the soil.

The whole of the work was entrusted to Mr. S. G. Munday, of Wallingford, Berks, whose sympathetic interpretation of the details, etc., greatly contributed to the success of the little cottage.

The cost of this complete scheme may be of interest, as economy in expenditure was of vital importance.

Cost of cottage, including all extras	£444	10	0
Cost of well and pump	38	0	0
Cost of drainage system	25	0	0
Cost of Fence..	4	10	0
Cost of land (¼ acre)	25	0	0
Total	£537	0	0

R.I.B.A.

Notes From the Minutes of the Council Meeting, November 3, 1924.

Architecture and Craftsmanship.—The following recommendations passed by the Art Standing Committee were approved by the Council.

That an additional Committee be formed, the purpose of which shall be to foster the best interests of the Crafts connected with the construction, decoration and equipment of buildings. That the Allied Societies be invited to form local Committees with a similar object in their districts. That one evening in each Institute Session be devoted to the reading of papers and discussion on subjects relating to Craftsmanship. That short lectures of a popular kind be arranged for, from time to time, at Conduit Street, and locally by Allied Societies. That the Board of Architectural Education be invited to consider whether more can suitably be done to assist the understanding of craft processes and the right use of material in the education of students.

Recognised Schools Medal.—On the recommendation of the Board of Architectural Education the medal for the best set of designs submitted at the Annual Exhibition of Designs of Students of Recognised Schools exempted from the Final Examination was awarded to Miss Elsie Rogers (School of Architecture, Manchester).

Archibald Dawnay Scholarships.—On the recommendation of the Board of Architectural Education the following awards were made:—R. H. Turner (Liverpool), £50 scholarship; A. C. Cameron (A.A.), £25 scholarship; G. A. Burnett (Leeds), I. R. Erith (A.A.), A. C. Todd (Liverpool), grants of £20 each.

R.I.B.A. Scholarships at the School of Architecture, Cambridge.—The Scholarships were awarded as follows:—First year, Miss Norah Aiton, Girton (£35); Second year, Mr. Edward Le Bas, Pembroke (£35).

Boards and Committees.—The following appointments were made:—L. Sylvester Sullivan, Board of Architectural Education; George Drysdale, Board of Architectural Education; E. J. Sadgrove, Royal Gold Medal Committee; L. H. Bucknell, Competitions Committee; T. Taliesin Rees, Housing Committee.

Registration.—The following were invited to serve on the Registration Committee:—R.I.B.A.—Major Harry Barnes, Arthur Keen, G. C. Lawrence, Percy Thomas, W. Gillbee Scott, J. Alan Slater. Society of Architects—A. J. Taylor, Noel D. Sheffield, C. F. Skipper, L. Sylvester Sullivan, E. J. Partridge, Thomas Wallis. The Committee was given power to appoint, at their own discretion, a number of Advisory members as representatives of the Allied Societies and of other bodies and interests affected.

Alleged Overcrowding of the Profession.—The following members were appointed to serve on a Joint Committee (with representatives of the Architects' and Surveyors' Assistants' Professional Union) to enquire into the alleged overcrowding of the profession:—Mr. Arthur Keen, Mr. Maurice E. Webb, Mr. Francis Jones.

Fellowship.—Mr. H. S. Rogers, M.A., F.S.A., of Oxford was elected to the Fellowship.

The Allied Societies.—The new draft By-laws of the Devon and Exeter Architectural Society were approved, the affiliation of the Burnley District Society of Architects with the Manchester Society of Architects was approved.

Pupils in Offices.—On the recommendation of the Board of Architectural Education the Council decided to recommend members and Licentiates of the Royal Institute not to accept pupils until they have been registered as Probationers R.I.B.A.

ISLINGTON.—A dance hall and restaurant is to be erected on the corner of Holloway Road and Parkhurst Road.

Sir Charles Ruthen, Director-General of Housing, and the Output of Bricklayers.

I have seen it stated in the Press that the Dutch bricklayer lays 2,000 bricks per day as against 500 bricks laid by the British craftsman. This statement, published broadcast and linked to a reference to my recent official visit to the Netherlands, is likely to be attributed to me and should be refuted.

I do not accept the statement as nearly accurate, and further consider that any comparison between the output of Dutch and British bricklayers requires a deal of careful qualification. The standard Dutch brick measures approximately 8 inches by 3½ inches by 2¼ inches, or roughly 63 cubic inches, whereas the cubical contents of the standard British brick is roughly 122 cubic inches. Therefore it will be appreciated that the Dutch bricklayer must lay double the number of bricks to produce approximately the same cubical contents of finished walling as that of his British brother craftsman. Further, if a very artistic Dutch brick much used in the Netherlands and exceedingly picturesque in the finished work is used, the comparison becomes even more impossible. This brick measures 6 inches by 3 inches by 1¾ inches, or practically 31 cubic inches, and therefore nearly four times the number must be laid to produce the same volume of work as that of the British brick.

I am not prepared to admit for a single moment that the Dutch workman produces a greater volume of output than the British workman, but would rather state definitely that the quality and quantity of work produced by the British workman in the building industry is equal, if not superior, to that of the workman in any other country. C. R.

Incorporated Church Building Society.

At the monthly meeting of the Incorporated Church Building Society held at 7 Dean's Yard, Westminster, on Thursday, the 20th inst., the Hon. Sir E. P. Thesiger, K.C.B., in the chair, grants were made towards building new churches at:—Southsea, St. Matthew, £250; Hesketh, All Saints, £400; South Lancing, St. Michael and All Angels, £200; Sandiway, St. John-the-Evangelist, £100; Wembley Park, St. Augustine, £300; and Llay, St. Martin, £400.

Towards enlarging or repairing the churches at New Brompton, St. Luke, £150; Farnham Common, St. John-the-Evangelist, £100; Gaywood, St. Faith, £200; Golborne, St. Thomas, £75; Hanslope, St. James, £125; Newcastle Emlyn, Holy Trinity, £150; Northfleet, St. Botolph, £150; Over, St. Chad, £120; Reddal Hill, St. Luke, £100; Spitalfields, Christ Church, £75; Watford, St. Michael and All Angels, £200; and Worthen, All Saints, £130.

University of London, University College.

Architecture Entrance Scholarships.

Fifteen Entrance Scholarships and Exhibitions are available for award to students entering University College, London, in October, 1925. Two of these are tenable in the Bartlett School of Architecture. Three others are available in any faculty of the College or in the School of Architecture. Full particulars regarding all the Scholarships and Exhibitions may be obtained on application to the Secretary of the College.

"Modern Practical Joinery." George Ellis. Fifth edition. B. T. Batsford. £2 5s.

The first edition was published in 1902, reprinted in 1903 and 1904. The second edition appeared in 1907, which was followed by a third edition in 1908, and a fourth in 1921. In our last week's issue we included a short article on "How to Write Books," in which it was emphasized that any book to be of real value must represent the result of an intensive study by the author. The material published must be comprehensive and of such a character as to ensure for the publication a long life. "Modern Practical Joinery" can truthfully be described as fulfilling these conditions. And in the publication of the fifth edition the author and publishers have incorporated all the latest data which has brought the book right up to date. No effort has been spared in the production of this work. The suggestions given in the Introduction have our fullest approval. The beginner will find that the author starts at the very beginning, nothing has been taken for granted, and the student, though he may possess considerable previous knowledge, would be well advised to read the text from the start and follow the author right through. The style is clear and easy to read. All the many tools used in the craft are described, as also is the action and effect of these many tools.

Planning the "Nest."

By J. E. Reid.

The world is feverishly awaiting the advent of the feminine architect, who has promised to bestow her personality upon the house planning of the future, that up to now has been the exclusive prerogative of the masculine mind, and introduce an order, that from her experience, will lessen, if not eliminate, the usual drudgery, true or otherwise, that has fallen to her share since she became the helpmate of man.

My friend Kenny confided to me that he was shortly going to marry the most wonderful girl in the world, who had ideas transcending anything that the mere man architect has so far evolved in the way of house planning, and invited me to accompany him to the abode of his fiancée, where, if I cared to sit at the table of wisdom, I could perhaps peck at some crumbs for my future guidance.

It was quite a pleasure, though not a new one, to hear all this, so I accepted. Kenny was proud of his girl, and rightly so, for she was pretty, but had a mind that had peregrinated into the lofty realms of domestic speculation where it was not easy for a mere man to follow.

"You see, Mr. Dobbs," she exclaimed, biting the end of her pencil and depriving her rosy lips of their rightful contour, as we sat round a table littered with perfunctory sketches and plans, in her father's house, "I have long awaited the opportunity to plan a house free from the uusal promiscuous gig saws that have for too long been the gadgets of men whose knowledge of domestic work is really appalling. Our house is to be a nest, not a rat trap."

I felt that it would be presumptuous to be the first to challenge her opinion.

"I am having a square hall entrance with the staircase bending round the bottom," she continued enthusiastically. "Staircases are a necessary evil, but I believe in going upstairs to bed."

I agreed.

"Now here is the drawing room," she went on, indicating a peculiarly shaped room on her plan. "Really, when you come to think about it, there is an appalling amount of waste space in a room. For instance, the carpet shows exactly where the amount of traffic is—round the fireplace and at the window, so——"

"Usually in front of the looking glass in a bedroom," interrupted Kenny aside.

She ignored him. "Mr. Dobbs," she continued, "I am making this room L-shaped, so as to have one room from back to front, and the surplus space I am throwing into the dining room, where more is required."

"A good suggestion," I remarked. "But how do you intend to enter the kitchen?"

"The servant, if we have one, will enter by the back, not come through the house, and as the dining room will have a hatch it will be an easy matter, if we do have a girl, for her to pass the plates through and bring the afternoon tea in by the door in the drawing room."

"You see," interrupted Kenny, "Gladys believes in saving shoe leather."

"We have a French window from which to step right into the garden from the drawing room. See the idea?" she continued.

"Rather a large step for a lady," I said.

Her eyes queried "what did I really mean by that remark?"

"I suppose that you intend to enter the garden from the drawing room in the same way as you enter the kitchen from the garden—ten steps or so?" I remarked.

"How mean you?" she exclaimed dramatically.

"The slope of the site, you know," I hinted.

She gazed at me aghast. "We are going to step *right* into the garden from the drawing room," she said emphatically.

I saw I had put my foot in it somehow, so said, "Now what about the upstairs?"

"We are having three bedrooms, a spare room, and a box room that will do for the servant, if we have one."

"I see you are having the fireplaces back to back," I said, looking at the plan.

"We thought that this arrangement would conserve the heat," she replied.

"Excuse me," I said, "but you have no support for that mass of brickwork."

She gave me a look that would have killed a more sensitive man.

"Why, how *are* masses of brickwork carried without any support? I have seen scores of walls erected on beams like it," she cried surprised at my ignorance.

"But Kenny told me you were on the economical stunt—excuse the word."

"Well, won't it save the cost of a wall below?" she reasoned.

"I hardly think so. You see it will be necessary to have masses of brickwork to hold up the ends of the beams. You also have the flues to carry up from the drawing room and kitchen separately. Artistic, no doubt, but hardly economical. It appears to me that you are having an amount of dead walling above and below."

"Dead walling!" she cried. "Dead, indeed! Women are sick of the modern death traps. Don't mention anything dead to me. Please!"

She cast a look of withering contempt and gave me clearly to understand that any further remarks would not be welcome. Soon afterwards I pleaded an engagement and hurried away.

* * *

"After all, Dobbs, Gladys found out that you were right," said Kenny about a week afterwards. "I have not bought the site with the awful slope, which I might have done had you not spotted what it would mean. By the way, we both wish to take advantage of your professional knowledge and place the matter in your hands."

* * *

The plans for Kenny's new house, after having been analysed and pulled to pieces by Gladys, were sent out to builders for prices. In her enthusiasm for the introduction of labour-saving devices she neglected to take into consideration the fettering hand of cost, which severely curtailed her ambition, for when the prices eventually came in, her "nest" was in danger of becoming a "rat trap" after all. The lowest priced estimate was ultimately accepted, and the contract signed by Kenny to go ahead with the work, he having to find the money, and she the spending of it.

Hardly had the foundation been dug, when one morning she came running into the office. "We *must* have the plan reversed in building!" she exclaimed breathlessly. "The Pogsenses have bought a site next to ours and I am sure I shall be unable to be friendly with that cold woman. Can you place the front door to look the other way?"

"My dear young lady," I replied soothingly, "if you reverse the plan, the drawing room and dining room will get no sun. The kitchen will have it all. Surely the chilliness of the north-east wind will be worse than the breath of Mrs. Pogsens."

She admitted that there was something in that.

It was after the foundations had been built up to the ground line that the real trouble commenced.

"Oh, Mr. Dobbs!" she cried one morning. "I have just returned from the site. "Don't you think that the rooms look pitifully small?"

"If you like I will go down to the site with you and see whether the builder has cribbed a foot or two," I replied. So we went down with a tape measure and measured the rooms. They were exactly as shown upon plan.

"Well!" she exclaimed in surprise. "They *do look* small to be sure. Had I never measured them, nothing could have convinced me otherwise."

She was satisfied for two days, and then entering the office exclaimed in an excited voice, "Oh, Mr. Dobbs, the builder is not using the same bricks as painted upon the plan."

I told her that the colour on the plan had nothing to do with that of the bricks, and that it was a technical colour used to indicate that the material differed from concrete or stone.

It was after this that her mind began to oscillate between the positions of the drawing and dining rooms. We had quite a hot argument over the matter. It was only settled when I told her that to alter the plan now would cost a large sum of money. The walls would have to be pulled down, there would be fresh plans to make, and the sanction of the local authority obtained, and when the time came for commencing a strike would probably be raging and prevent any further building. This settled her.

The builder went on with his work. The lid was soon on. The plasterers became busy inside and outside and the whole thing was assuming the appearance of a real nest, when she startled me by saying that she had a colour scheme.

I have come to regard a woman who has a colour scheme as a danger to connubial bliss. I pitied Kenny from my heart. But perhaps it was better to be inflicted with it now than afterwards.

Her mind ran on black and orange. Purple and grey became a natural sequence, and brown and white held the field for a while. Until I gave her *carte-blanche* to suggest to the painter what she required I got no peace, for I was beginning to tire of her. So I left it at that, and soon the appearance outside the house, let alone the interior, became a mass of jazz shades, resembling the camouflage of the war time. Anyhow that was her concern, not mine. What with sundry orders she had given herself to the builder, what with the changes in this and that, even to having a door moved a foot out of its lawful place, the contracted amount was much enhanced. Anyhow she was pleased, so was Kenny. Streams of friends came to visit the domicile. They all went in raptures over the deep white glazed sink fitted with a plug in the scullery; the lovely porcelain enamelled bath and large lavatory basin "in which the fledgelings could be bathed" said one enthusiastic visitor. Gladys hid her blushes and told everyone that the house was well built because it had concrete under the walls and below the wood floors and that there was a damp proof course to prevent the damp from rising up the walls from the ground. Everything had been done in the house that would satisfy the most exacting mind, except one thing. Kenny had been promised a cosy corner in which to smoke and enjoy his pipe in the evening with his slippered feet resting on chairs. A cosy corner there was not in the whole house, all were occupied by cupboards.

The Guildhall Library.

By Katherine B. Esdaile.

The Guildhall Library has been fortunate in securing some interesting items from the second portion of the Gardner Collection of London Topography. The first impression is one of amazement at how much has been lost of recent years, at the numbers of mediæval buildings which survived into the eighties of the last century. The drawings of White Horse Yard, Fetter Lane, and those of the front of that inn with its three quaint oriels, suggest a remote country town rather than the neighbourhood of Chancery Lane in the later nineteenth century; the brothers "Damned" and "Praise God" Barebones must have passed its portals daily; it was the scene of the meeting of Lords Stowell and Eldon in 1776; and Mrs. Brownrigg "whipped three female prentices to death" almost next door. The Rolls Chapel and its monuments again—one of them the work of Torregiano—was only demolished in 1895; modern vandalism has no worse crime to answer for, as the drawings by Matthew Digby Wyatt make tragically clear. Almost equally criminal, and a wholesome warning in these days of attacks on the remaining City churches, was the destruction of St. Benet Fink, Paul's Wharf, and of St. Peter le Poor, of which admirable pictures, including Malton's original sketch for the well-known aquatint of the latter, have been secured for the City.

Among the numerous delicate drawings by T. H. Shepherd depicting the past glories of London, one is of refreshing value as showing a fine old building still in existence. This is the Lord Mayor's Court Office, Old Jewry, now the headquarters of the London City Police; unfortunately the noteworthy carved staircase is not shown, but it well deserves the like commemoration. Doctors' Commons is gone; gone the old entrance to Sergeant's Inn; the Duke's Theatre, Dorset Gardens, the views of which would be a find for any grangeriser of Pepys; old Salters' Hall, old Painter Stainers' Hall, the old Belle Sauvage, of which a rare engraving by Dighton has been happily secured. Of especial interest are the tickets of invitation to the annual St. Luke's Day Feast at Painter Stainers' Hall, with the signatures of Masters and Stewards. We are brought near to the art of the seventeenth century when we see the signatures of Venio and Kneller to one of them, and the design of art painting genius which they jointly thought fit to select.

But there is another aspect of old London for whose disappearance we may be wholeheartedly thankful. The horrors of the common lodging houses in Field Lane and Clerkenwell, mere boarded floors over open sewers full of filth; the yet worse arches in which, above dead cats and nameless horrors, slept the homeless, hopeless outcasts of sixty years ago; these things make the worst pages of *Alton Locke* a ghastly truth. Then there are the sad engravings executed by prisoners in the Fleet and the heart-rending series of prints showing the cruelties exercised on the prisoners between 1689 and 1691, before the reign of the notorious Bambridge and the enquiry which led to the suppression of the worst disorders. Such things make us shudder and turn away; but those who deny the progress of humanity should go to the Guildhall and learn their errors.

One lighter side of London Life, the Traffic Problem, remains for mention. An exceedingly rare engraving, executed about 1858, shows the crossing from the Exchange to the Bank bridged by a high "Street Crossing Bridge designed for the Safety of Ladies and children crossing the crowded Streets." From its airy altitude ladies, serene and unruffled, gaze down upon the clash of carts, waggons, hansoms in the road below, where women and children are in imminent danger of death. The lift was not when this idea was mooted, but if lifts were substituted for the giddy spiral staircases leading from the pavement, the street crossing bridge might yet become a wholesome substitute for the subway.

The drawings and engravings mentioned here are but a fraction of the new wealth of the Guildhall Library; enough has been said to show that no one interested in the City can afford to miss the sight of these new relics of the past, and to increase our regrets that the Gardner Collection as a whole was not, as we at one time hoped it might be, secured for the nation.

OXTED.—The provision of a secondary school is under consideration by the Surrey County Council.

PRESTWICH.—Plans passed: 10 houses, Nursery Road, for County Construction Co.; 24 houses, Simister estate, for Mr. A. Jones.—Messrs. Taylor & Simister, architects for the Midland Bank, are negotiating regarding a scheme for the erection of a branch bank at the corner of Bury New Road.—Messrs. Sambrook have a proposal for erecting shops, etc., at the corner of Scholes Road and Bury New Road.

ST. MELLONS.—A report of the Rural District Council states that 108 semi-detached houses are to be built on land at the Gaer.

WARWICKSHIRE.—The County Council propose a scheme, estimated to cost £40,000, for bringing the heating, lighting and power installation at the county mental hospital up to date.

MESSRS. LIBERTY'S NEW PREMISES, REGENT STREET, W. MESSRS. EDWIN T. & STANLEY HALL, Architects.

Correspondence.

Architectural Education. II.—The Master.

To the Editor of THE ARCHITECT.

SIR,—It appears to be somewhat obvious to the discerning mind that the attention of well-wishers in the arena of architectural politics seems to be focussed intently on the method of achieving the passage of the Registration measure into law. Whether this will or not be the case is outside the scope of this letter, which is an endeavour to consider the resultant influence and effect of Registration on the present system of architectural education and those responsible as teachers of the art.

Let us briefly examine this probable effect in the educational field once the measure is a *fait accompli*. There is not any shadow of doubt that compulsion being brought to bear, a very large number of practitioners and assistants, architectural designers, pseudo-housing experts, call themselves what they will, will find themselves in the unenviable position of being 'twixt two alternatives, one the option of complying with compulsory admission to the Register, or faced with the choice of pursuing their calling either under another guise or abandoning the same for some other sphere of activity in life. There are, of course, several types who prefer to remain outside the fold of the elect, but for general purposes one may safely divide them into two categories—the first being that body of men who through a natural endowment of the quality of education and *savoir faire*, that phrase which conveys so much, coupled with a goodly inheritance of worldly gifts, who will realise the importance of qualification and the quintessence of architecture as a fine art and profession. The second category consists of that body of men, unfortunnately preponderating in numbers, who, through various reasons, do not possess those characteristics and mental outlook, and who (without wishing to judge them too harshly) regard the profession solely from the commercial standpoint, failing to realise the artistic essentials so necessary to creative effort, and possessing a negative interest in the welfare of their *confrère* or the common goal to which all architects are striving—*i.e.*, a better and comprehensive public attitude to architecture as a profession. These are but a few militant influences which induce this host of men to stand aside and poach on legitimate preserves.

At present one sees no signs of any preparations being made to assist them even to comply, and we are faced with an insufficiency in schools and teachers. It is a fact which

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UNION BUILDINGS, PRETORIA. A COUNCIL CHAMBER.

HERBERT BAKER, A.R.A., ARCHITECT.

"INK-PHOTO" WM BROWN & CO. LTD. LONDON, E.C.3.

UNION BUILDINGS, PRETORIA. THE PRIME MINISTER'S ROOM.

HERBERT BAKER, A.R.A., ARCHITECT.

R.A. 1924.

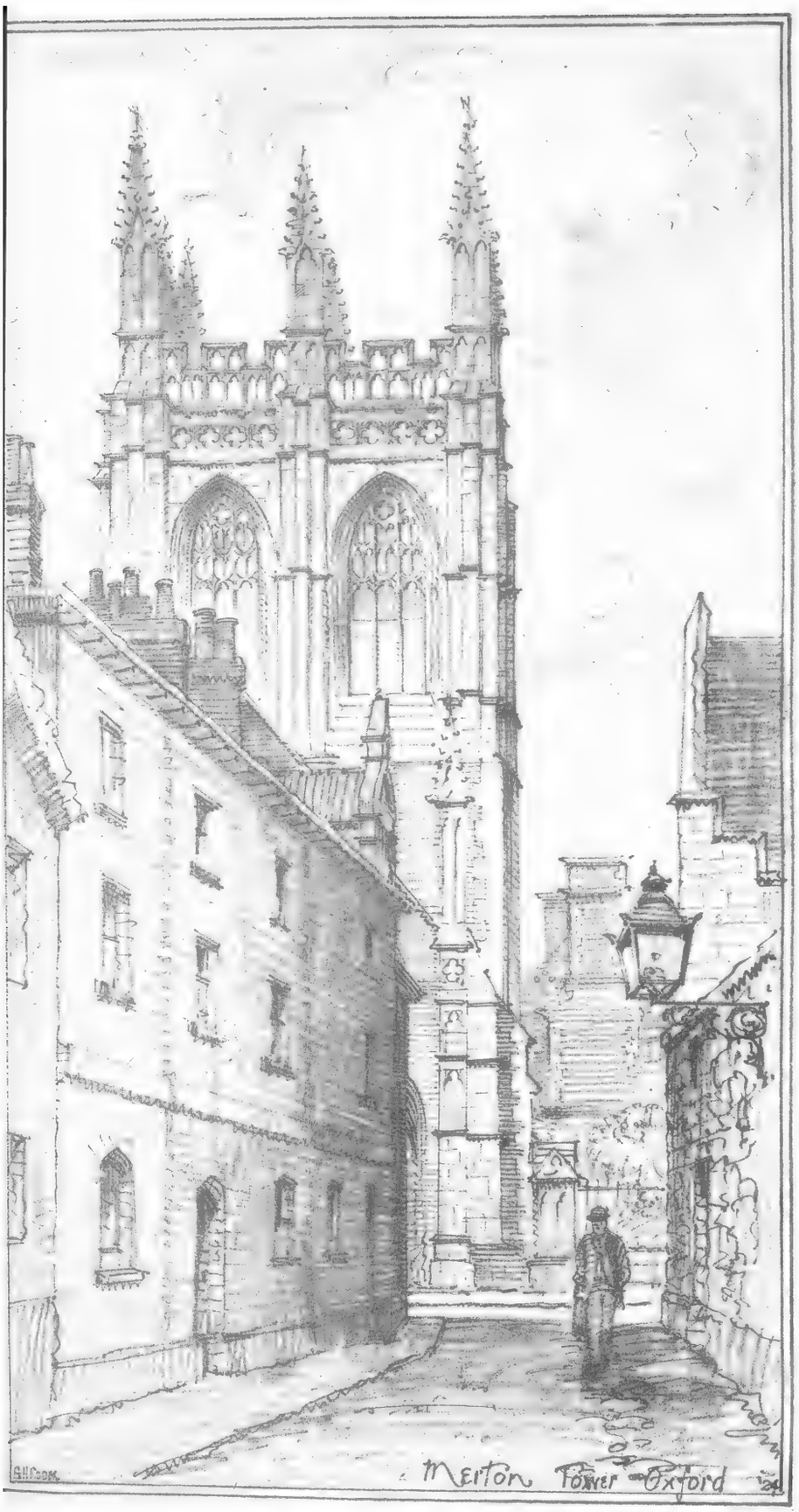
ALTERATIONS TO WESTMIN

H. PERCY ADAMS, CHARLES HOLDE

"INK-PHOTO" WM BROWN & CO. LTD. LONDON E. C. 3.

ER HOSPITAL, LONDON, S.W.

AND LIONEL G. PEARSON, ARCHITECTS.



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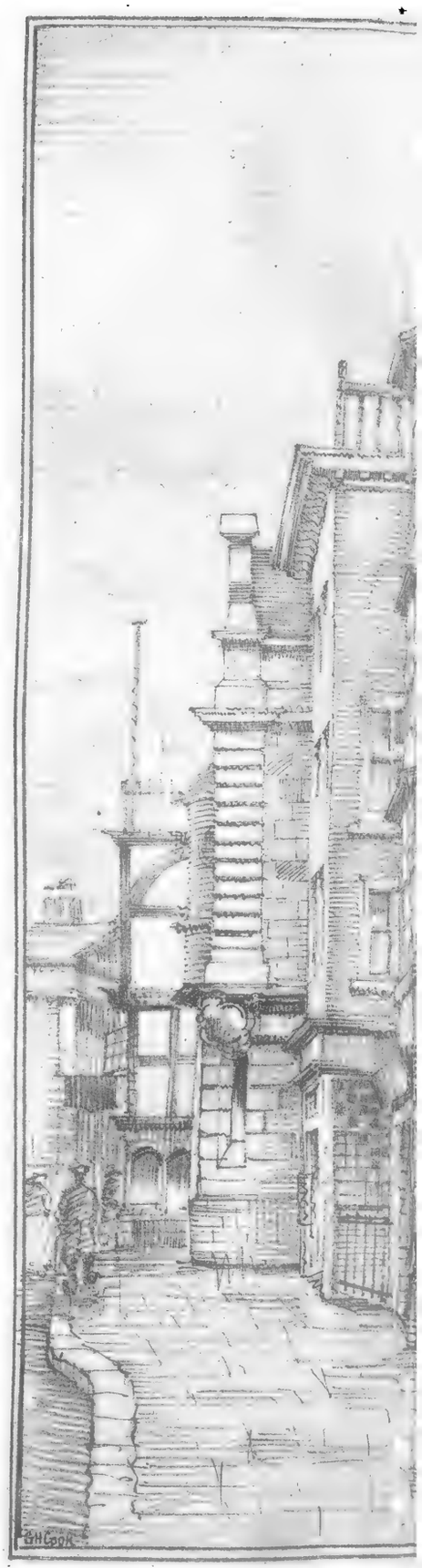
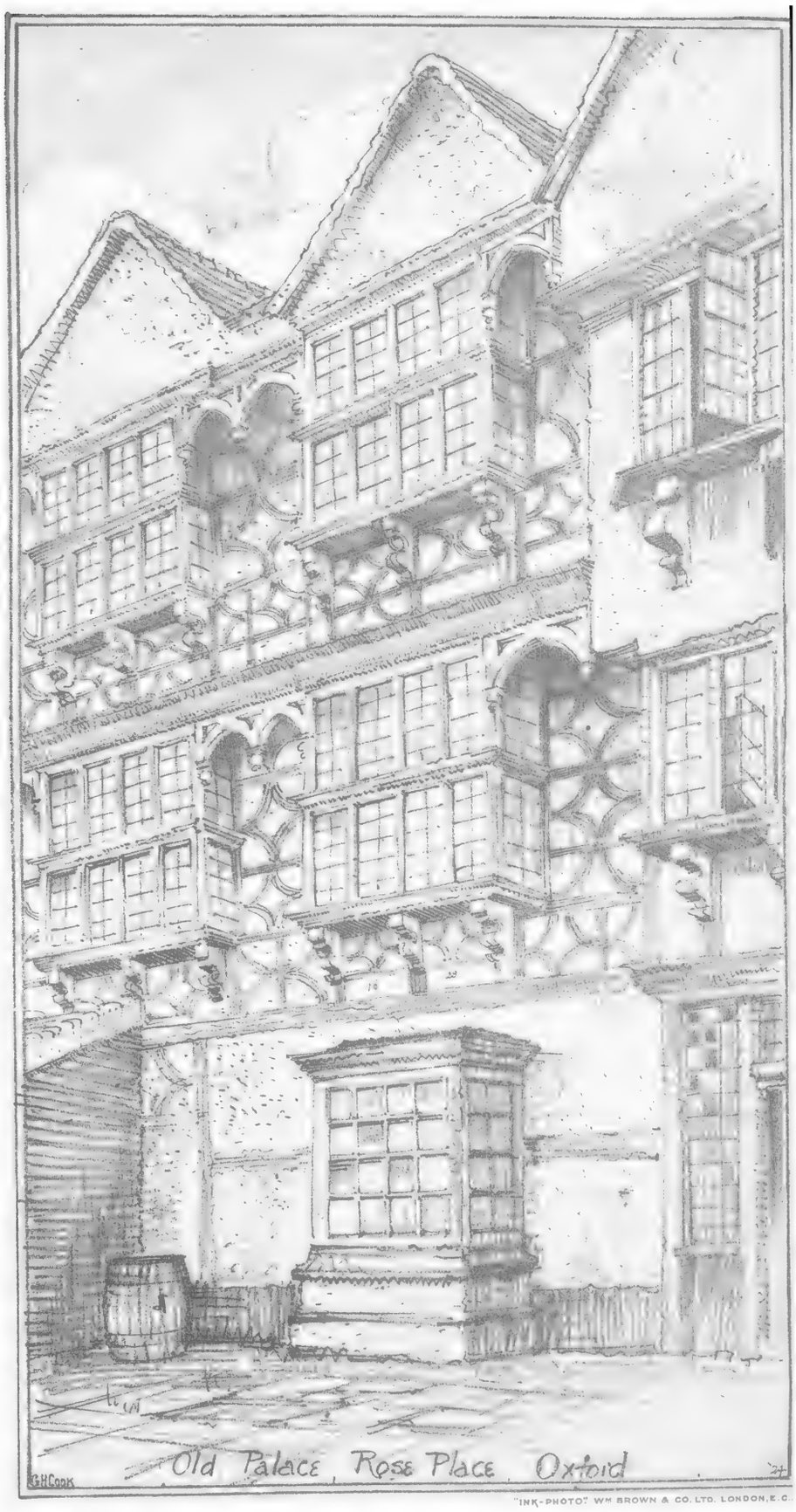


HIGH STREET

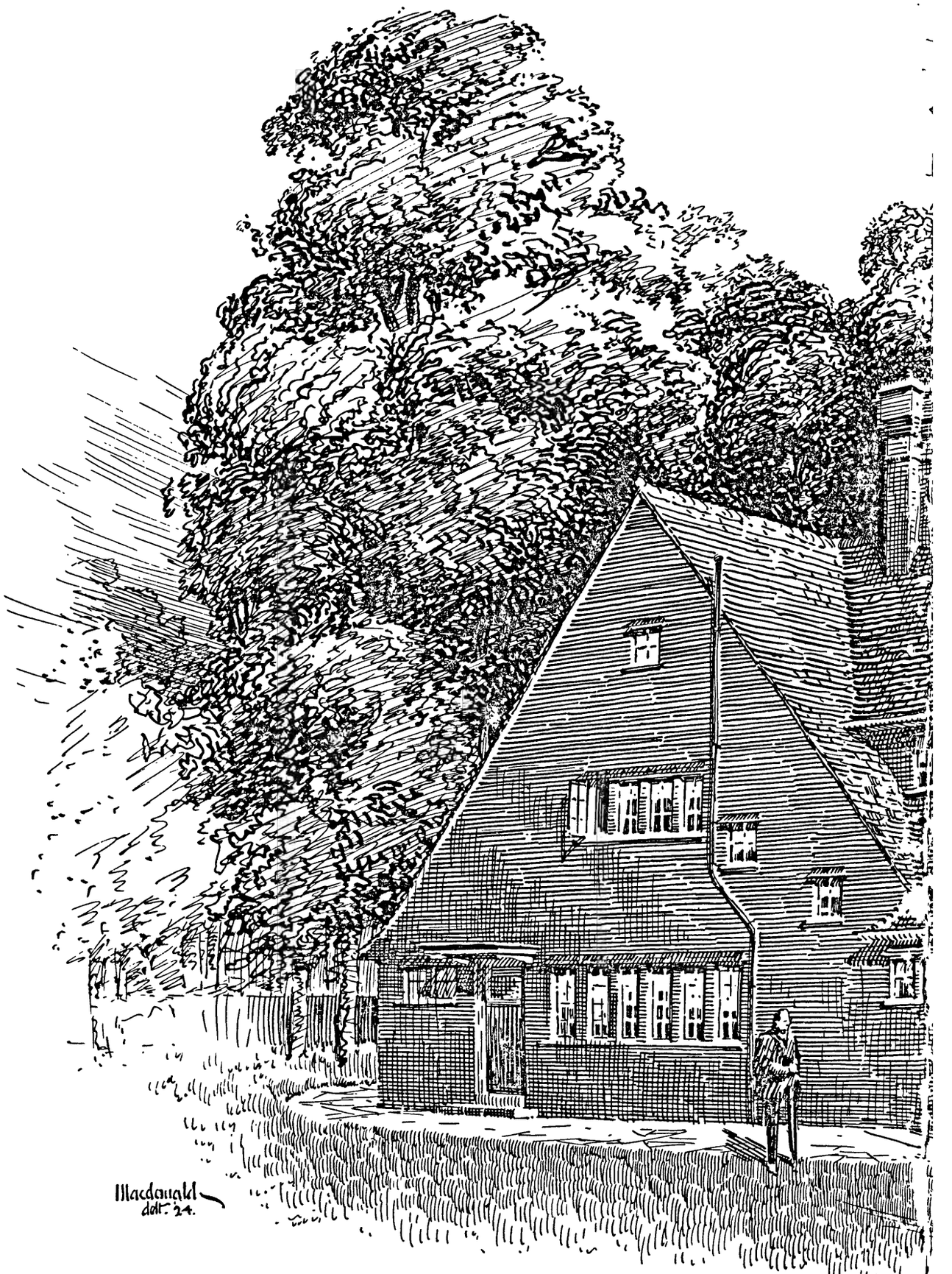
FROM PENCIL DRAWINGS

T OXFORD.

BY G. H. COOK.



OLD PALACE, ROSE PLACE, OXFORD.



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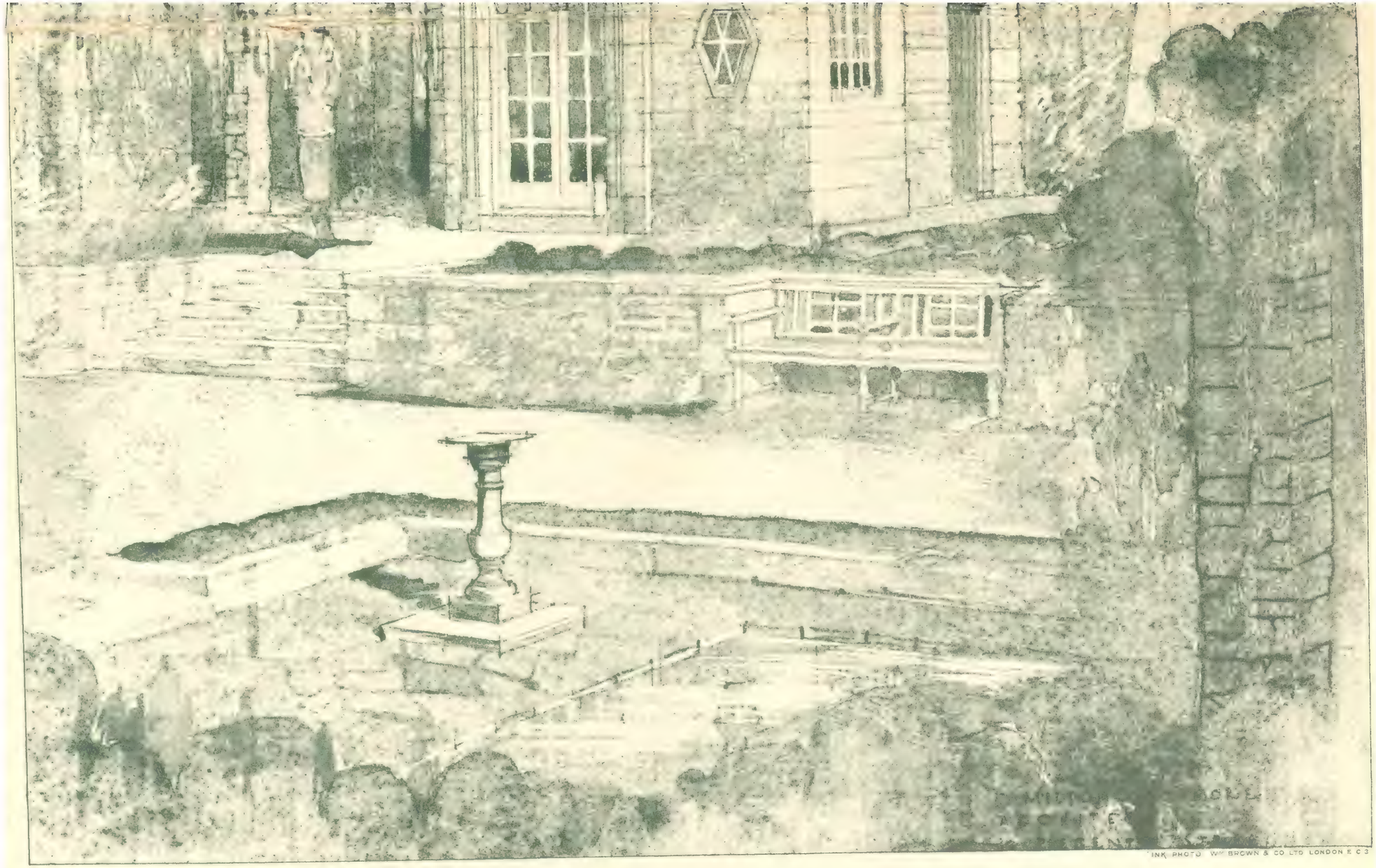

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R.A. 1924.

GARDEN PAVILION, UPPER DRIVE. HOVE.

F. MILTON CASHMORE. ARCHITECT.

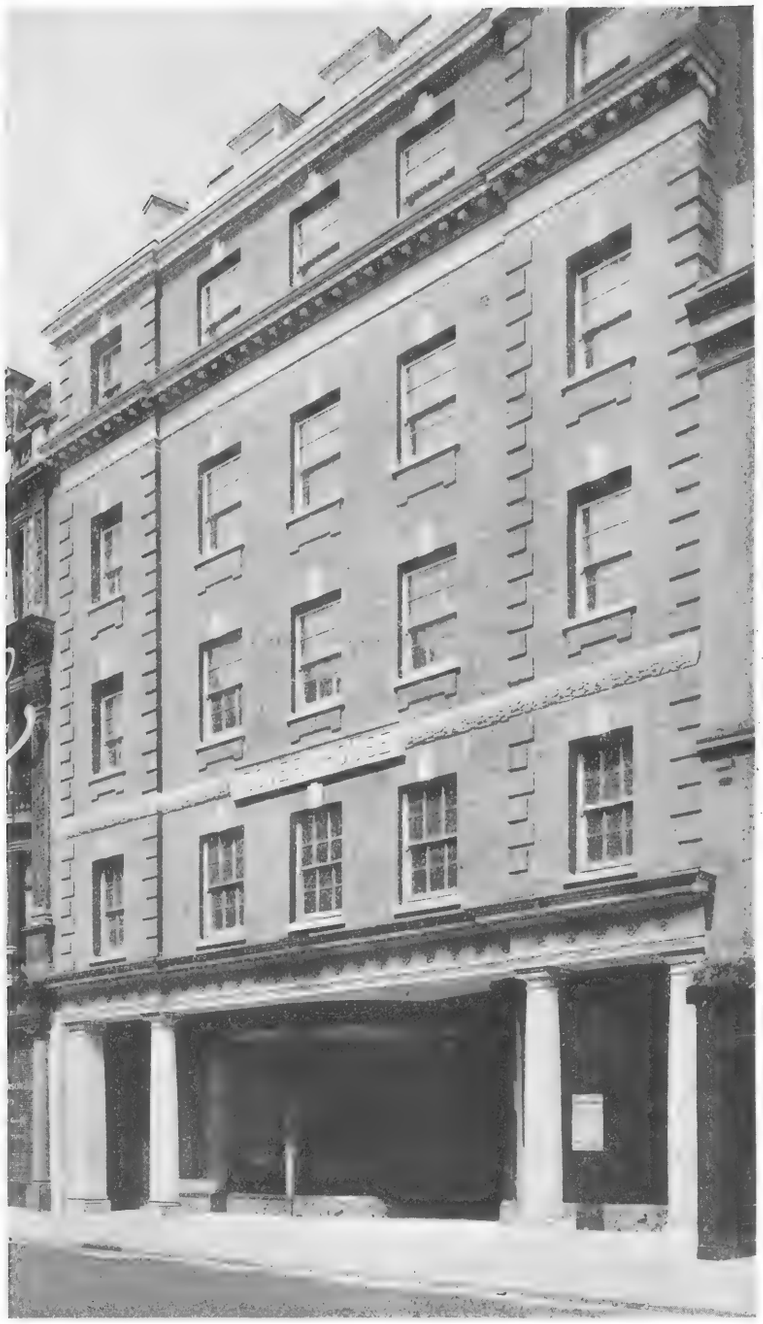
No. 326 REGENT STREET, W. Messrs. Henry Tanner, Architects.

cannot be ignored. Further, no statistics are available as to the number of these men who practise architecture.

The insufficiency of schools and instructors in architecture is proved in the following sense. Although there are a fair number of architectural schools in the country of the " recognised " type, this class of school will be found to be quite inadequate to cope with the needs of the average aspirant to the Register, inasmuch as the fees of tuition are high and in some cases exorbitant, and, further, the whole policy of the recognised school is so wrapped up in the exclusive and somewhat snobbish academic aura of University ideals and standard as to put it outside the reach of many. It must not be forgotten that the educational standard of this outside element is not high, otherwise, had it been so, one would assume that the need for Registration would not have been so paramount.

The system of recognised schools will either have to be rendered more cosmopolitan and altered to include a greater number, graded according to standard, or else the recognition fetish must go by the board. Several schools at present outside the pale will have to be included in order to meet the demands of the unqualified. Firing the deadly shot with the registrationery cannon on the one hand must not give rise to indifference to the humane spirit which will turn our thoughts to the wounded on the other. The latter, having been repelled and admonished, must be brought in, tended and converted in order to prevent the discordant note creeping in, the fly in the victory ointment, and a feeling of suppressed rebelliousness of spirit which would be likely to stand in the way of the remedial efforts. Whereas, if every facility is offered (and by facility one would imply that more within reach) to the unqualified to qualify the passage of the Bill should be much simpler.

That policy of a sheltered trade unionism for the profession is all very well in its way, but it can be made very vicious in aspect. It seems so thoroughly wrong to attempt to deny to any man the right to enter a profession, and this restraint is so very conspicuous nowadays and causes an intense amount of bitterness, which cannot be wondered at. Talent will reveal itself whether the subject is educated or not, and instead of putting insuperable barriers in the way of its achieving its proper place in life, every attempt to encourage it should be made. One can therefore foresee in the near future the recognised schools becoming training centres for those whose lot in life will be to teach, and all over the country these men will go to undertake pioneer work in the smaller schools, teaching the less fortunate to achieve a place legitimately belonging to them. The numerous art schools already existing will be called upon to give a more comprehensive training in architecture than is at present the case, working to an approved syllabus and conditions set by the Board of Education conjointly with the R.I.B.A. The present body of inspectors under the



ROVER HOUSE, NEW BOND STREET.

Board of Education will be possibly augmented to contain qualified architects competent to inspect and control the teaching activities in the various localities all over the country. Then, again, the Board of Education, permeated as it is with the scientific and technological aspect of education, will possibly realise that architecture is pre-eminently an art with certain technical aspects which occupy a secondary place yet which are inseparable as well as indispensable, and all heartburnings and dispute as to what should be omitted and included in the average art school curriculum will cease.

The Registration Board will expect a good knowledge and capacity in both for its approved members, and yet it will never have the powers or machinery available to enforce this without the aid of the body primarily responsible for education in the country, namely, the Board of Education. To placate the numerous requests for inclusion on the Register in a thoroughly satisfactory manner this aid will have to be sought and a co-operative scheme worked out. The art schools of the country, owing to their unique position and advantages, will become the training centre, and the present recognised schools will resolve themselves into the higher education colleges for teachers. Recognition as at present implied will embrace a wider ground and will be applied in a more general and comprehensive sense. The wretched farce of a one or two evenings a week instruction in architectural subjects which exists at present in so many schools will cease, the demand for application to the Register involving the necessary provision and facilities for whole time daily study and instruction.

The future graduates of the recognised schools who may be disposed to sniff at occupying what might appear to be minor positions will realise the supreme privilege of being put in a position to assist in bringing home to the public the absolute importance of architecture as an indispensable factor in life. Looking at the whole subject broadly, there cannot be any curtailment of inspiration or scheduling into pigeon-hole tactics of creative effort as Mr. Beresford Pite would have us believe. At a time such as the present, when we architects are praying for a betterment of our professional and public status, Mr. Pite would ask us to join with him and substitute the letter b for p, which no one has the slightest desire to do.

The points dealt with in this attempted forecast are very general, brimful of subject matter for discussion, and, although no one can foresee the future, on the roadway

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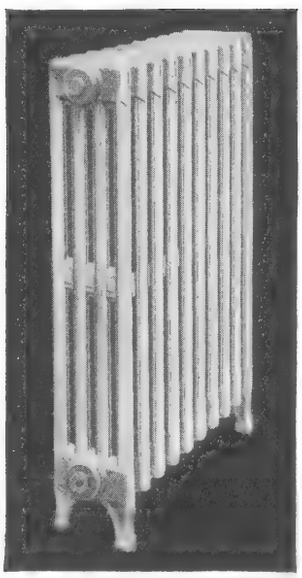

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to it there are definite signposts which one is by compulsion brought to study and to which those inexorable masters, Time and Progress, lead their flocks of sheep, as Mr. Pite dubs them, and which certain track most sane men would elect to follow rather than seek admission to his select flock of goats whose right to be known as such is always open to serious question.

With reference to the foregoing, it is an accepted fact that architects are face to face with unfair competition all over the country and many other evils which are too well known to repeat here, but they are also on their part suffering from too great a sense of their own exclusive importance, especially shown in the educational sphere, shutting their eyes deliberately to the all important fact that we are living in times when elasticity of programme, breadth of outlook, courage in grappling with modern problems and demands, are indispensable assets to those who wish to maintain anything like a reasonable position and prestige both as members of a time-honoured profession and as individuals.—Yours, etc. "AJAX."

[*We do not agree with our Correspondent as to many of his points.—Ed.*]

The Ideal Client.

By Dudley Harbron.

We have had a surfeit of ideals of late. We have read the praise of the Ideal Bed, we know the virtues of the Ideal Boiler, and the Ideal Home has become so ubiquitous that naturally good kindly-tempered architects have wished it to Jericho. Too much of a good thing causes one to sigh in reaction for something really wicked.

Yet despite these obvious warnings, architects continue, young and old, to sigh for the Ideal Client. As if all clients were not already that. If you ask the next whom it is your good fortune to encounter what he thinks of himself in his relation to you, it is very certain that you will find you entertain the stranger unawares. It is his pardonable privilege to look upon himself in that favourable light. Probably he is right; in any case it makes for pleasant relations so to visualise him. For though the poet Burns wished for the power to see himself as others saw him, ordinary men, being unpoetical, prefer that others should regard them as they regard themselves. So we shall find that most clients are very human; and poetry providing an uncertain sort of fortune, its weavers are unlikely to complicate our dealings by their unheralded appearance.

But these people are real.

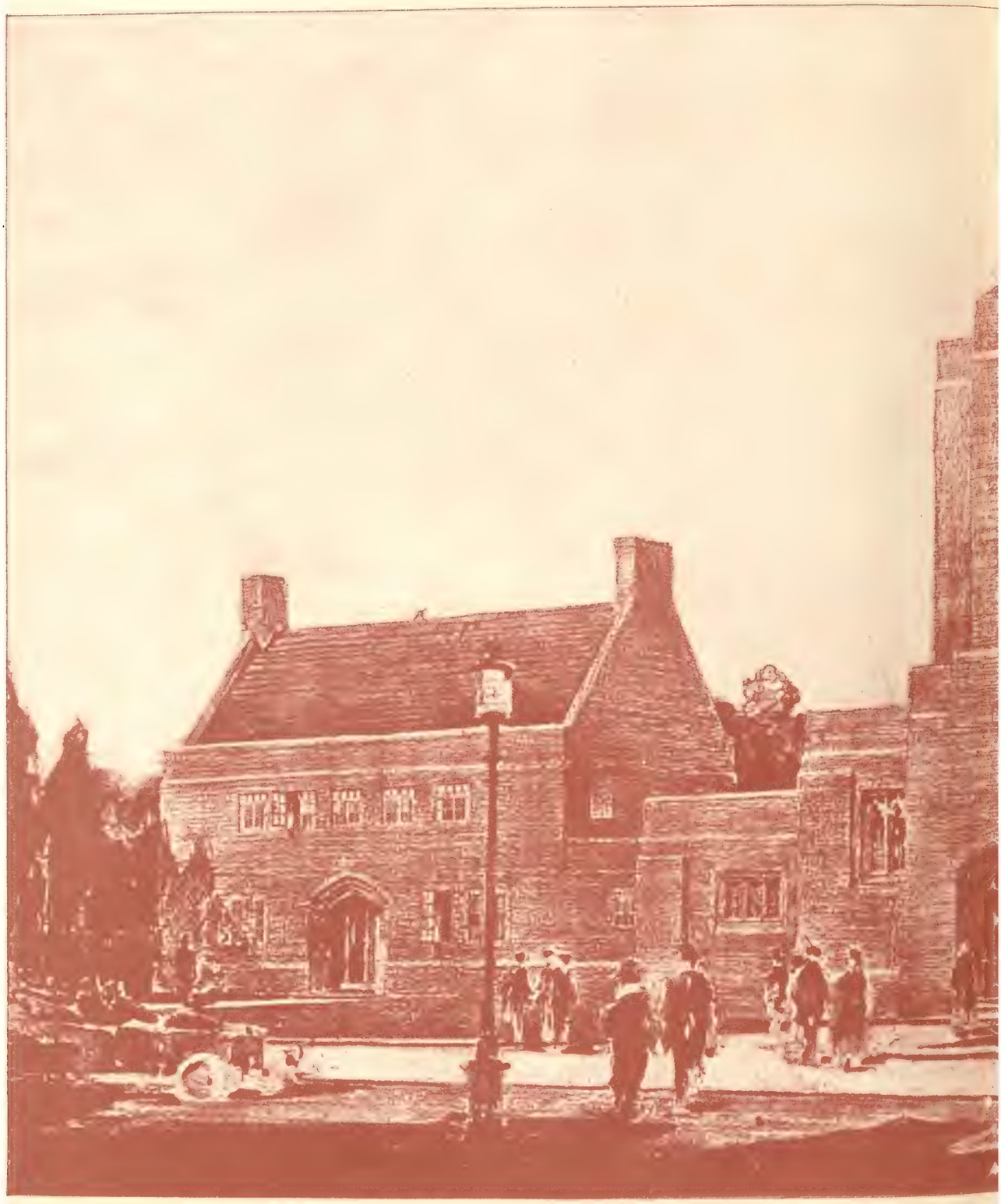
The Ideal Client is an entirely imaginary creation. He exists sometimes very vividly in the mind, at others he is but a shadowy shape with nebulous outlines, or later he disappears altogether from our cognition, quite eclipsed by a hard, matter-of-fact, non-luminous body which has interposed itself between the receiver and the transmitter of light. When clearly seen and described by two observers, it is noticeable that, though he has often a family likeness equal to that of twin brothers, there are marked differences in his characteristics that distinguish him for each, and that make for the certitude we all feel upon encounter that he is not the only tenant of his world, but one of an innumerable host who make a habit of frequenting architects in their offices, peer down at them from buildings, and tap them on the shoulder—just when they were going to drive the ball, which they have foozled, from the tee. Such conduct does not by any means exhaust his activities nor define his most frequented paths; given the mood, no corner is too inaccessible for him, no occupation too trivial but he may chance to accost us with his benign smile. He is ever welcome, though his acts are mischievous, yet we look forward eagerly to the next encounter, when we hope to fix him and shake him by the hand.

For some, he is a fat, jolly sort of fellow with a cheque book, the forms in which he signs with relish, well knowing that they will be honoured at the bank. "Money is no object" is a favourite phrase of his. "Don't worry about the extras. They are well worth it. Besides, I ordered them," he readily admits over a huge pile of daywork accounts. As for the roof, it may be slate, the brickwork he likes may be close-jointed and mechanical, but then so do you, they keep out the wet. "None of this hand-made nonsense," he exclaims. "Plate glass windows, and don't forget to gild the railings. Cheerio!" "Good heavens!" you exclaim, "my ideal client isn't a bit like that." Possibly not—he would not be yours if he were. Still, let us try again. This time it shall be a lady, elderly, refined, wealthy, a widow. "Good morning," she says kindly on entering. "I have been recommended to you by the Viscount. If it is not troubling so busy a man too much, I should like you to design a memorial in memory of my late husband: money's no object. What I want, what I feel sure you can give me, is the most exquisite scheme, something original! You must come and stay with me to select the site in the grounds. It will have to be consecrated by the Archbishop. Of course, if it is necessary that you should visit Athens or Italy, say so! My villas are at your disposal, and of course, though I do not like to mention so delicate a matter, your charges—well, so long as I get the right thing—are immaterial." "Madam," you respond, readily, "I know exactly what you desire, something that money cannot buy, but which I have to give. It may be necessary to visit Italy, and I shall be charmed to come and choose the site. The vistas are so important. I have an idea that what you desire is something like this. A large smooth lawn, on the midst of which, quite level with the grass, lies a plain level stone, inscribed simply with your husband's name; a wall of two-inch hand-made bricks, loosely set, will shelter this quiet retreat. Herbaceous borders may be planted along the four sides, while near the house, in the centre of the longer axis, I suggest a simple wrot iron grille gateway with a tall pier on either hand for support, crowned as it were by two sorrowing figures, by Cherubic, with bowed heads. Then some rough stone steps. And at the further end of the axis, another grille, framing the vista of the distant focal point, preferably a church. I must think it over."

Not your ideal client?—then perhaps: the telephone bell rings. "The managing director of the Universal Something, sir." "I am instructed by the chairman to ask you to run down to Blank, choose a site, arrange with the railway to construct a siding, and to build our new establishment for about 10,000 hands, with of course housing accommodation and social amenities for the workpeople, roads and all that! Of course, old chap, assure yourself that it is a commercial proposition; we leave it to your judgment. Thanks. Good-bye." If very eminent and busy, "The Lord Mayor." "Blow!" "London's burnt down: will you rebuild it?" "Will you put that in writing?"

Try again? We would gladly, for all these clients are the right sort, even those ideals who love a fight, who reluctantly, after long mental wrestling, come round to our point of view.

And meantime real clients are looking for the ideal architects they say they seldom find, who, did they but know as we do, are waiting to welcome them. Still, if like anxious beau advertising for belle, we were to hang up a neat condensed specification of our ideal on the door knob, it is doubtful, if it worked as successfully as we could wish, it would help to make the world any brighter. Would not the absence of all friction rather conduce to such an insipid, distilled, desiccated existence that architects would sigh longingly for a real, not an ideal, client, one who knew what he wanted, and said so plainly? But then, perhaps, such a one is *ideal* also.



R.A. 1924.

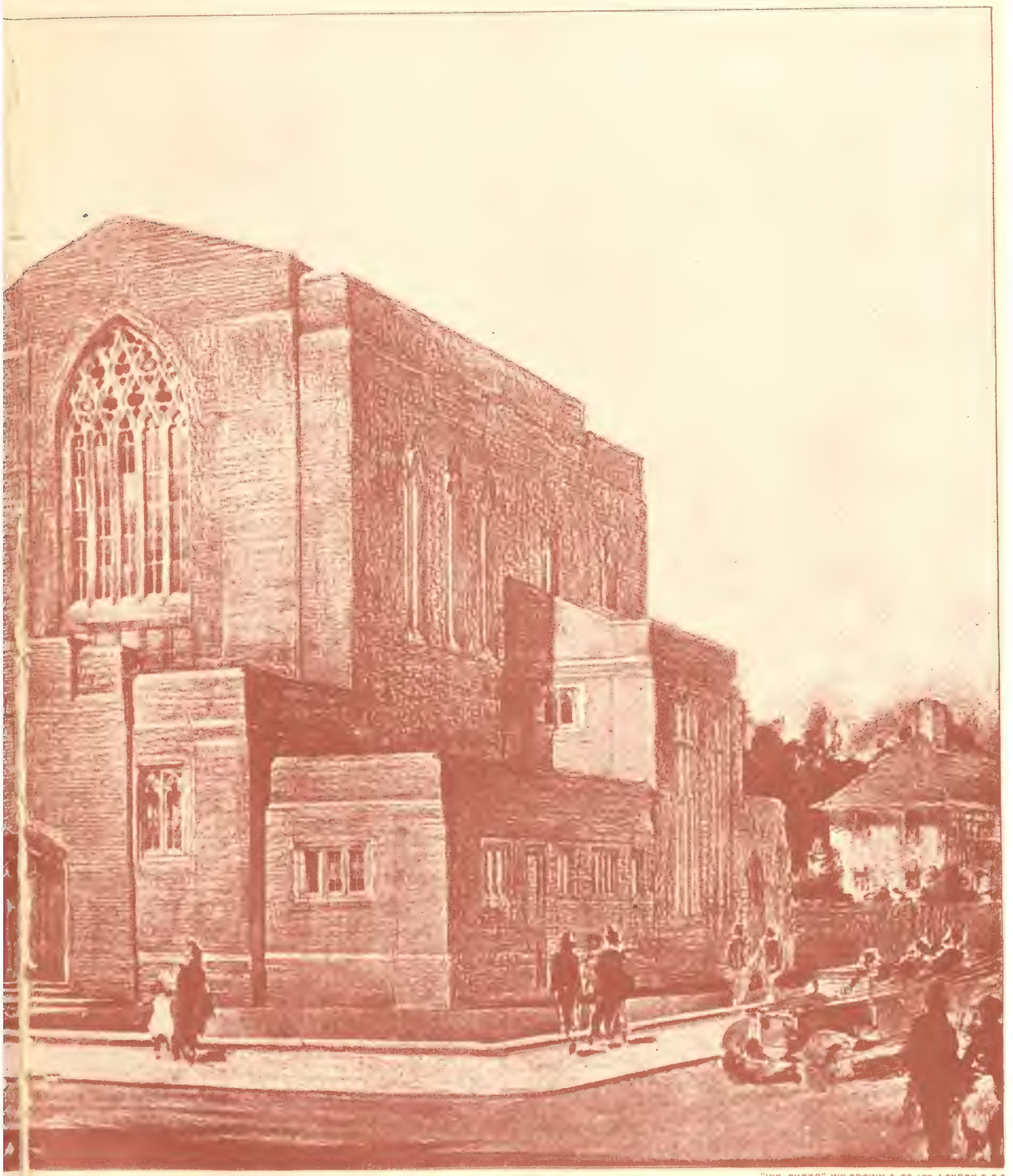
CHAPLAIN'S HOUSE. CHURCH AND IN

THE DEAF AND DUMB. S

EDWARD M

DECEMBER 5th, 1924.

LIBRA



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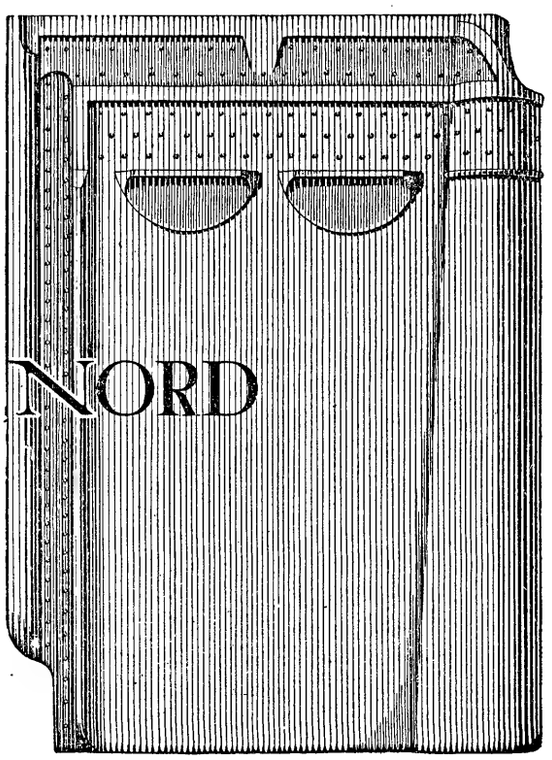

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General News.

ARDLEY.—The Board of Education have approved plans of the Warwickshire Education Committee for a school for 400 children.

ATHERSTONE.—Warwickshire Education Committee are purchasing a site for the erection of a school.

BARNES.—Sketch plans of the proposed secondary school for boys have been revised by the Surrey county architect to meet requirements of the Board of Education, and it is estimated that the new scheme will involve an outlay of £29,760.

BATTERSEA.—The Borough Council have passed plans for a synagogue at the rear of 104 Bolingbroke Grove, for Mr. Chas. Living.

BEDWORTH, LEICESTER.—The Board of Education have approved plans for three new class rooms at the elementary school to be erected by the Warwickshire Education Committee.

BEXHILL.—The Corporation now propose to invite tenders for the erection of a mortuary at Little Common Road.

BRENTFORD.—The Urban District Council have passed plans for 40 houses, Boston Road, for Messrs. Taylor & Co.

BULKINGTON.—Warwickshire Education Committee have prepared revised plans for an infants' school.

COVENTRY.—The Warwickshire and County Joint Committee for Tuberculosis have asked for the services of Mr. A. C. Bunch, county architect, in connection with the supervision of the sanatoria and other buildings and the new buildings, at the King Edward Memorial Sanatorium.

CROYDON.—The Corporation have appointed Mr. Victor Williams, of York Buildings, Adelphi, as architect in connection with the alterations to be carried out at Nos. 38 and 40 High Street.—The Borough Surveyor is to prepare a scheme for the erection of 102 houses on the Waddon estate.—The Ministry of Health have sanctioned loans of £3,350 for purchase of land in London Road for the erection of baths, and £20,000 for the construction of an outfall sewer.—Plans passed: 58 houses, Dovercourt Road, for Messrs. Crowley Bros.; 6 houses, Norbury Avenue, for Messrs. Chesterton & Sons; 31 garages, 2 workshops and one office, London Road, for Mr. C. G. Allen; 5 houses, Haling Park Road, for Messrs. Parris; 4 houses, Stanford Road, for Mr. F. W. Cattermole; 7 houses, Hunter Road, for Messrs. Scratchley Bros.; 60 houses, South Norwood Hill, for Messrs. Edmonds & Blake; 12 houses, Waddon Avenue, for Mr. G. H. Dales; 10 houses, Waddon Avenue, for Messrs. F. Roe & Sons; 22 houses, Tenterden Road, for Mr. A. E. Bates; 6 houses, Ingram Road, for Mr. Jefferies.

DORKING.—The Surrey County Council have under consideration the acquisition of a site for a secondary school.

DUNCHURCH (WARWICKSHIRE).—The Boughton Trust proposes to proceed with a scheme for the provision of a central school.

EPSOM.—The Surrey County Council propose the erection of a mixed secondary school.

ESSEX.—A joint committee of the county authorities of Essex, Cambridgeshire, East and West Suffolk, are to consider the enlargement of the Royal Eastern Counties Institution.

FOLESHILL.—Warwickshire Education Committee have decided to build a school for about 250 children.

GUILDFORD.—The Borough Surveyor has been instructed to prepare plans for the erection of flats at the housing sites.—Tenders are now to be invited for the erection of slipper baths and public lavatories.

HACKNEY.—Schemes have been sanctioned for electricity show rooms and buildings to cost £25,000 and for sub-station buildings to cost £4,130.—Plans passed: 18 shops and flats, Stamford Hill, for Mr. Morris; mission hall, Hackney Grove, for Messrs. Wratten & Godfrey; saw mill, Priory Place, for Mr. J. Duffell.

HANWELL.—Plans passed: parish hall, Rosebank Road, for Messrs. W. Harbrow, Ltd.; 4 houses and shops, Greenford Avenue, for Mr. S. Gregory.

KERESLEY.—Warwickshire Education Committee are to erect a school for 300, with arrangements for enlargement by 140 places.

LEYTON.—Lea Bridge Road is to be widened at a cost of £15,500.

MERTHYR TYDIL.—The Corporation have purchased housing sites at Treharris and Gellifaelog, part of which is to be used for recreation purposes.—Mr. Thackeray, borough architect, suggests a two-year house building programme of 629 houses He suggests that specialist concrete contractors should be invited to take part in the work if by so doing the speed can be accelerated and the cost of building reduced as much as possible.—Plans have been provisionally approved for a new bridge and approaches at Graigberthwyld, the estimated cost being £35,000.—Mr. E. W. G. Richards, architect, is to discuss with Mr. H. A. Gold, advisory architect, Carnegie Trust, questions regarding the proposed central library.—A scheme is under consideration for improvements at the swimming baths to cost about £1,500.

MITCHAM.—A site of eight acres is being purchased at a cost of £3,600 by the Surrey County Council for the erection of a secondary school.

RUGBY.—The Board of Education have approved plans for a new secondary school and tenders are to be invited by the County Council.

STOCKTON.—The Ministry of Health have approved plans for the erection of a clinic at a cost of £3,150.

STOKE HEATH.—Warwickshire Education Committee propose to provide a school for 200 children.

WESTMINSTER.—The London County Council have let the site of 38 Smith Square on a 99 years' building lease to Lord Glenconner, at a rent of £300 a year.

WHITLEY.—The U.D.C. have called for revised plans for cottages at the cemetery.—The surveyor has been instructed to report as to the provision of a public abattoir, new stables, bathing pool and sewerage scheme.

YORK.—Plans passed by Town Council: Nursing home, Heslington Road, for Friends' Retreat.

YORKSHIRE.—The Rawmarsh Urban District Council are going to build new public baths at an estimated cost of £22,000.—The tender of Messrs. Geo. Longdon & Sons, Ltd., of Sheffield, for the erection of a War Memorial in Preston Market Square, designed by Sir Giles Gilbert Scott, R.A., for the sum of £10,199, has been accepted.—The tender of the Provincial Construction Co., Ltd., Sunderland, for the construction of percolating filters and equalising tanks at the Mitchell Laithes Sewage Works, Dewsbury, has been accepted for the sum of £7,099.—The tender of Messrs. W. J. and R. Turnbull, Leeds, for the erection of 24 houses of the parlour type, at Ilkley, has been accepted for the sum of £575 per house.

Canterbury City Council.

Small Dwelling Acquisition Acts.

Copy of Motion Submitted to General Purposes Committee on October 15, 1924, by Walter R. Pierce.

"That this Council invite Builders to enter for a competition for the erection of pairs of houses to conform to the above Acts.

This Council offers a Prize for the best pair of houses.

A Panel of Judges to be selected from Architects and Surveyors conversant with local construction.

A maximum price to be fixed not exceeding £600 per house with premium of 5 per cent., 10 per cent., and 15 per cent. on all money saved in construction below £600, *i.e.*, a Bonus of £15 if built for £500, £10 if built for £550, and £5 if built for £575.

When erected, the houses to be opened to Public as an Exhibition, and a small sum charged for admission, the proceeds of which could be used for Prizes. Also a ballot box might be placed in one of the houses for the Public to record their votes on which they consider the best house.

Furnishing Companies might also like to enter into competition to furnish a house when erected.

The Houses to be offered publicly for sale subject to the conditions of the above Acts. Materials used in Construction of the houses to be of wide range, Brick, Concrete, Steel, etc.

Land to build upon to be provided by the City Council.

2 London Road, Canterbury. November 22, 1924.

"The Architect" Fifty Years Ago.

NOVEMBER 28, 1874.

ROAN'S GIRLS' COLLEGE COMPETITION.

The governing body of "Roan's Charity Estate" are about to erect new secondary schools at Greenwich for the education of 300 girls. Some months since they invited designs under motto from the following six selected architects:—Messrs. Gale, Dinwiddy, T. Roger Smith, Wallen, Giles & Gough, and Newman & Billing.

The whole of the designs were submitted to a professional adviser, and those of Mr. Dinwiddy have been selected for execution by the governors. The premium of £20 for the design judged second in merit has been awarded to Messrs. Giles & Gough.

VOL. CXII.—2020. THE ARCHITECT DECEMBER 5, 1924

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Early American Architecture.*

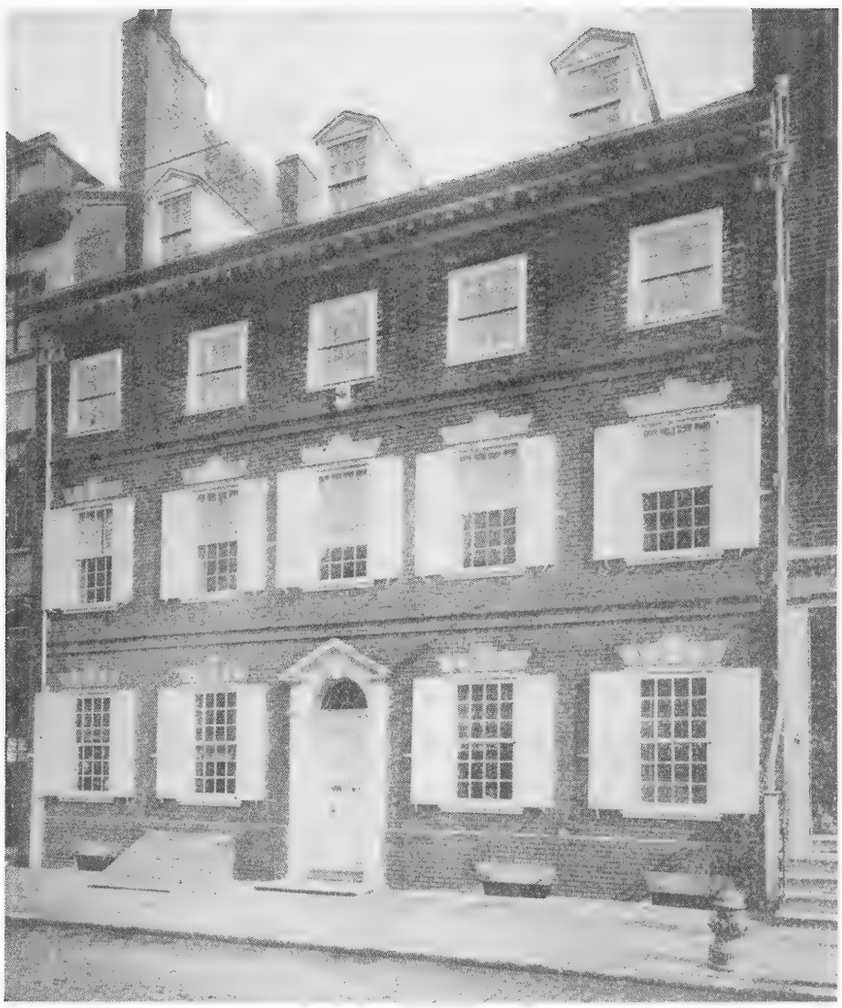
CHIMNEYPIECE IN THE COUNCIL CHAMBER, WENTWORTH HOUSE, LITTLE HARBOUR.

STAIRS FROM THE HANCOCK HOUSE AS NOW SET UP.

This book forms the substance of lectures delivered by Mr. Fiske Kimball at the Metropolitan Museum in 1920. America, like our own country, has gone through a period in which the work of the Georgian epoch was anathematised, and the turn of the tide was perhaps first marked by the successful attempt to save Mount Vernon in 1859. The attention directed on the older American buildings by the publication of "The House with the Seven Gables" and "The Wayside Inn" doubtless influenced public opinion, and by 1869 "Colonial Architecture" began to be studied and admired. Mr. Kimball's work covers the period between the coming of the early settlers and the triumph of romanticism in the second quarter of last century.

The author disposes of the fiction that the earliest American dwellings were of logs, as log huts were probably introduced by settlers from Northern Europe, while the first English timber buildings in America were those in which the logs or boards were—unlike those used in log huts—disposed vertically. But previously to these the early dwellings of the settlers were wigwams partly below and partly above the

* "Domestic Architecture of the American Colonies and of the Early Republic." By Fiske Kimball. New York: Charles Scribner's Sons. £3 3s. net. Messrs. B. T. Patsford, London agents.



JOHN REYNOLDS (MORRIS) HOUSE, PHILADELPHIA, 1786-1787.

surface of the ground, and similar to those of mediæval Europe.

The first frame buildings in the English colonies seem to have been the houses erected by Sir Thomas Dale and his company in Virginia in 1611. Damp and decay have in the South destroyed many of the earlier frame buildings, and there is no frame house in Virginia for which a date within the seventeenth century has been authenticated, while in New England there are many. The earlier American buildings differ little from those of similar date in England, saving that they bear the marks of the greater stress of financial conditions. It was after the universal adoption of the frame house and the greater prosperity of the colonies that differentiation of type gradually crept in. The gambrel roof with its double slope and the attentuation of columnar adjuncts were the outcome of the use of wood as the paramount building material. The balustraded flat surrounded by pitched roofs is also an American feature of frequent occurrence, while it was sparingly resorted to in England, and the details of staircases and chimneypieces were developed on lines unlike those of English prototypes. Still, the work of the Colonial period falls under two heads, which are well illustrated by the chimneypiece in the Council Chamber of Wentworth House, the like of which we might find anywhere in England, and the staircase of the Hancock House, the curved and twisted newel of

GORE HOUSE, WALTHAM, MASSACHUSETTS: GARDEN FRONT, 1799-1804.

ARLINGTON, ALEXANDRIA COUNTY, VIRGINIA.

INTERIOR DOOR AT THE WOODLANDS, 1788.

which is utterly unlike our own Georgian work. Dormer windows also assumed a thin and delicate proportion, instead of the sturdier proportion of English work. We have never understood Mr. Eberlein's objection to the term "colonial," which exactly defines a type of building which was a break-away from the general Georgian character of English buildings.

Mr. Fiske Kimball is, we think, quite right in separating the architecture of the Early Republic from that of the Colonial period. Its marked formality governed by classical precedents is very apparent in such buildings as Gore House, Waltham, Massachusetts, and Wilson House, Ann Harbour. The greater use of brick and stone in the South also had its effect on building traditions there, while the aristocratic instincts of the planters found suitable expression in great columned porticoes embracing two storeys and designed on classical lines. Much of the detail of this later phase is delightful, such as the door of Woodlands, dated 1788, but America, like our own country, was submerged by a volume of tasteless and ignorant work in the middle decades of the nineteenth century.

The book gives a complete picture of the typical vernacular architecture of America, which, coupled with the Spanish influence of old California and Florida and the teachings of French tradition, has gone to resolve the character of modern American building.

We see in it the gradual breaking away from English traditions and the building up of something which is definitely original, and it would seem that one of the assets most worth having in the modern architecture of all countries is that which has grown out of the demands of race, climate and local necessity rather than the centrifugal force of educational codes or travel. An architectural Roman Empire of style may come about, but if it does it would never have the force and vitality of the architecture of Rome, which was the definite national expression of a race which conquered the world and rode roughshod over its subjects until they merged themselves with the conquerors. Commerce may demand buildings of similar character in different lands, but we hope it will never succeed in eliminating the individual expression of differing nations as evidenced in architecture.

The book is admirably illustrated and bears evidence of the great knowledge and care of the author.

Concrete Publications, Ltd., whose publication office has been 35 Gt. St. Helens, London, E.C.3, announce their change of address from this month to 20 Dartmouth Street, Westminster, S.W.1.

The Main Committee of the British Engineering Standards Association have recently authorised the secretary, Mr. le Maistre, to accept the cordial invitation of the German Standards Committee (the N D.I.) to be present at their annual meeting on December 13. He is also going to Prague to give an address on "Industrial Standardisation" before the recently formed Czechoslovakian Standards Committee.

Our Illustrations.

ALTERATIONS TO WESTMINSTER HOSPITAL, LONDON, S.W. H. Percy Adams, Charles Holden & Lionel G. Pearson, Architects.

GARDEN PAVILION, UPPER DRIVE, HOVE. F. Milton Cashmore, Architect.

CHAPLAIN'S HOUSE, CHURCH AND INSTITUTE, ROYAL ASSSOCIATION IN AID OF THE DEAF AND DUMB, SHEPHERD'S BUSH, LONDON, W. Edward Maufe, Architect.

Notes and Comments.

The Decay of Stone.

Professor A. P. Laurie gave a lecture on the above subject to the students of the Royal Academy. He said that the ordinary forms of stone decay did not require special mention, but the cause of the rapid decay of modern stonework was the injurious effect of sulphur dioxide which is produced by the burning of coal. This attacked the calcium carbonate of limestone and the calcite which formed the binding material of stone, the sulphur dioxide in the presence of air and moisture forming calcium sulphate which, being slightly soluble in water, was slowly washed away.

The trouble arising from sulphur dioxide is not confined to urban districts but is met with at such places as Ely and Tintern. As the result of the evidence collected the the best remedy seemed to be to treat such buildings with a binding material depositing silica cement and to wash them during the summer with water in order to remove the excess of sulphate of lime and diminish the dangers of crystallisation.

The subject is one of great importance especially in London where we are constantly hearing of the effects of decay.

The National Welsh Memorial.

Much discussion has taken place at a meeting of the Cardiff City Council about the proposal to erect the proposed National War Memorial on the circular space in front of the Town Hall. Mr. Lanchester has written to state that in his opinion the site is not a suitable one for a memorial of the scale proposed. The fund collected amounts to nearly £30,000 and it is proposed that the memorial should take the form of a shrine. We believe that a large memorial of this nature placed in front of the Town Hall would be unsuitable, as it would unquestionably dwarf the neighbouring buildings, but it is quite unnecessary to do as the Committee proposes—have a full size model made—to settle the question. All that is required is to have a number of photographs taken and to combine two negatives, one of the buildings and their surroundings taken from certain standpoints and the other a wash drawing of the memorial taken from the same position and reduced to the same scale. The compound photographic views would then show exactly what the memorial would look like far better than the temporary structure which it is proposed to erect at a considerable cost. But Cardiff, which has done well in the way of its public buildings, has shown itself absolutely blind to the essential fact that their relation to one another is even more important than their individual design.

Facts Not Paper.

Mr. Loe Strachey writes in the "Spectator," that what we now chiefly need is actual demonstration of some of the newer systems of building proposed to meet the housing shortage. He says that some suitable piece of ground should be allotted for this purpose and that inventors should erect houses there under the general supervision of a clerk of the works who should watch their construction and take notes of their actual cost. A visit to these houses would enable many to decide as to their merits, for as it is we have on all sides a multitude of papers containing statements which we have no means of checking. It is not to be wondered at that under these circumstances comparatively few are willing to abandon old and tested results for experiments, the outcome of which is uncertain. Had Mr. Pemberton Billing not had the courage to test his theories his cheaper system of housing might have secured support, but when the rain comes and his houses were practically resolved into mud, the point was settled.

"Observation."

We have before us the first number of a new publication which, judging by the expression "Autumn" on the cover, is to be a 1s. quarterly. Its sub-title is "A Collection of Observations on People, Activities and Places." The editors are two ladies with a man sandwiched in between—Eileen Smyth Wood, Bernard Hebert and Margaret Tatton. They say they will make the survey of mankind as broad and catholic as possible. Contributors may write about men, women and children, or they may describe countries, travel, economical and political life, and art and craftsmanship from China to Peru. The contents include Gold and Blue; The Inimitable Observer; The Surroundings of a well-known English Town; Nature Life in Malabar; An Observer on the Downs; A View of Hastings; Impressions of Grace and the Georgian House; the cast by Geoffrey and Ruth Clark is illustrated by some crude drawings.

We do not know whether "Observation" has a long and prosperous life before it or a short and checkered career, but we wish it good future. The publishing firm is the Leploy House, 65 Belgrave Road, Westminster, but the coloured cover might well be improved, our observation tells us it is very crude!

Mr. Topham Forrest's Visit to America.

Mr. Forrest, who has visited America at the request of the L.C.C., states that the buildings of New York are far too high, especially the older skyscrapers, which make the streets between them resemble canyons. This defect is partially dealt with under the new Zoning Regulations which, though they permit the erection of very high buildings in certain quarters, insist on the upper stages being set back at an angle from all frontages. Mr. Forrest expresses the opinion that many classes of American buildings, and especially their hotels, are far ahead of anything we have done here, and some of the hotels of the smaller American towns are superior to any we have in London. He has been much struck with the merits of American plumbing, which he considers far better than our own, and is generally impressed with the radical changes which ought to be made in dealing with future reconstruction in London.

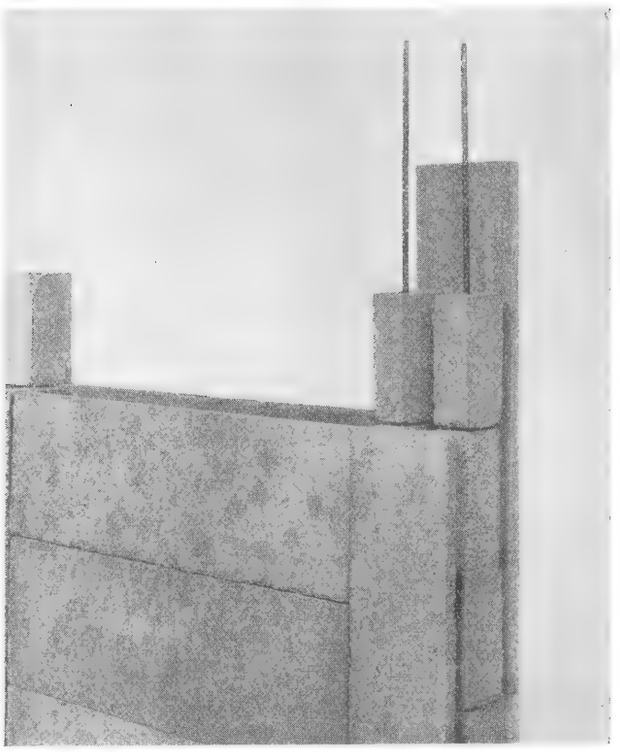
Obituary Notice.

We regret to announce the death of Mr. John Slater, F.R.I.B.A., architect, who died on Monday last, December 1, at his house at West Hampstead. He was seventy-seven years of age, having been born on July 28, 1847, at Bishop's Stortford. After studying at University College, London, he was articled to the late Professor T. Rogers Smith. He started practising in London in 1873. He held the office of surveyor to the Berners Estate in London for a considerable number of years. He had an extensive experience in connection with disputes arising in the Building Industry, and was a member of the Tribunal of Appeal under the London Building Acts. He was president of the Architectural Association in 1887 and vice-president of the Royal Institutes of Architects in 1900-4. He designed a number of electric lighting stations and factories and many town residences in Gower Street, Berners, Newman and Wells Streets in collaboration with Messrs. J. M. Keith and Mr. J. A. Slater, architects.

Cheaper Building.

The Senlac System.

The Yorkshire Hennebique Contracting Co., of Leeds, have invented and patented a method which secures the elimination of temporary timber work and shuttering, and is called the "Senlac" system. It is a pier and panel system, but instead of the piers being cast *in situ* in their



SHOWING ANGLE BLOCKS.

entire lengths they are formed of short interlocking members 4 feet 6 inches in length, which can be carried by a man and which are threaded together by reinforcing rods. The only care needed is in the first setting out, subsequent operations following automatically. Our illustration shows one of these angle blocks. The company, in order to assist local builders, is prepared to put down the necessary plant in any convenient centre to manufacture precast concrete units in large quantities.

Cast Iron Houses.

Mr. James A. Potter of Leeds has invented a system in which 3 feet by 3 feet cast iron plates are bolted to a steel framework, the outside being finished with stucco and the inside lined with plaster or woodwork. The weight of metal used in the erection of two houses amounts to 25 tons. The openings must necessarily be 3 feet square or multiples of those dimensions.

Steel Houses.

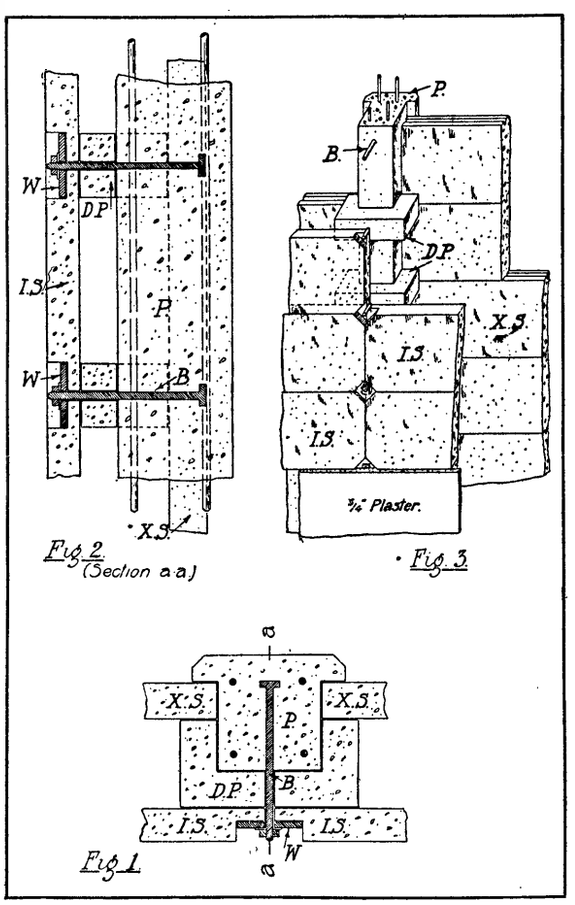
Lord Weir and other advocates of steel houses found their arguments on the rapidity with which such structures can be erected either on wooden or steel framework the enduring value of the material. The interior of Lord Weir's house are either suggested as bituminous paper or composition boarding. Naturally these last economies are no essential part of any special system as economy can be effected in a brick building if whitewashed brickwork is substituted for plaster, and breeze or concrete slabs for quarter partitions and composition boarding for ceilings. Obviously also it is open to anyone to use asbestos tiles as Lord Weir proposes. The nett result of all these economies is a certain reduction in the price of the house which can hardly with fairness be placed to Lord Weir's direct credit.

The Burney System.

Commander Burney has made proposals which have attracted much attention but the merit of which remains to be tried and tested. The material used is made from a waste product which is treated chemically, forming a tough hornlike product which is under pressure incorporated with cement. It is claimed that the resultant material is stronger than concrete and only about $\frac{2}{3}$rd of its weight, while it can be drilled and sawn like wood and takes a polish. By varying the ingredients different results can be obtained, hard and impervious for outside use and softer for internal purposes. The blocks of which outer walls are formed are composed of a square network of ridges which face internally joined to a continuous outer surface, while the blocks are grooved to fit into one another at the edges and bolted. Two tests must be applied to anything so novel, one that of cost and the other the lasting quality of the material when tested by time. At present information of these points is not available.

The Kent System.

Col. H. Vaughan Kent, of 34 Victoria Street, Westminster, has invented a system of pier and panel concrete construction which results in a $10\frac{1}{2}$ inch wall composed of 2 inch or



3 inch breeze slabs fixed at either on the inner side to irons cast into the concrete piers and screwed to a rebate in the inner breeze slabs, the outer concrete slabs fitting in behind a rebate in the piers, while a concrete distance piece holds the two slabs apart. The system is both strong and simple, and there is no necessity to roughcast it externally. The air space is 4 inches wide and the system one which lends itself to rapid construction, while a considerable saving is effected over brick.

DUDLEY.—The Borough Surveyor has prepared a lay out of the Netherton site on which 60 houses are to be erected.—The excavations are to be carried out for the foundations in connection with the proposed erection of a new town hall.—An engineering section of the Technical College is to be built at a cost of £25,000.—The Grammar School is to be enlarged at a cost of about £7,000.

Architectural Education in the Old Days.

A contributor has sent us the following, which is a humorous picture of conditions which existed in the "good old days" of the middle of the last century, and which reads like fables to-day now that architectural education has become a reality. It may induce many to be more tolerant of mistakes made by the "schools."

CRIBB.

He was the newest pupil bound to Mr. Cadger, an architect on whom fortune smiled, and he was awaiting the arrival of his principal.

Dressed in an Eton suit some sizes too small for him, he leant against the office counter and surveyed the office staff.

Cribb had been destined for the Church, but his father, a man of small means and smaller initiative, came to the conclusion that architecture was almost as respectable as divinity, and needed less capital.

Mr. Cadger had initiative, which had been an unfailing help since the days when, as a working joiner, he had drawn out in chalks sketches for some speculative builder who, noting his talent, had employed him to do similar work, until one day he acquired a back room and a brass plate on which was inscribed his name with the legend, "Architect, Surveyor, Auctioneer, Valuer and Estate Agent."

His progress had continued by leaps and bounds till he was recognised as the leading authority in architectural matters in the great cathedral city of X. He had such a keen appreciation of talent that he always sought fitting instruments to assist his efforts, nor was he jealous of allowing others to dabble in the fine arts. His sense of commercial values was keen, and he would express strong views as to the evils arising from overpaying for any services rendered, while, unlike many, he practised what he preached.

In person he was tall and stout, with magnificent side whiskers and an address which could ring the changes from gentle persuasion to autocratic command; nor were the cruder terms of vernacular speech foreign to a knowledge which was comprehensive.

His office staff at the time of which we write consisted of a chief assistant who had had struggles in the past, but had reached a comfortable salary of £2 5s. under Mr. Cadger; two improvers, who lived in hopes of becoming assistants in this or other famous firms, and three pupils, whose fathers, warmed by Mr. Cadger's accounts of the rewards of a great calling, had each of them contributed £200 to his treasury.

No office boy was employed, for so keen was Mr. Cadger that his staff should master every detail of an architectural routine that he put aside personal inclination and utilised the services of the youngest pupil in this capacity, even allowing him the privilege of fetching his lunch daily from a neighbouring hostelry.

The offices consisted of three rooms—the principal's sanctum, reached from the outer office and also from the courtyard of the adjoining White Lion by a narrow stair; a large front room facing the High Street and lighted by three large windows on each of which was inscribed in fine gilded letters Mr. Cadger's name and some among his many qualifications; and a back room, formerly the scullery of a tenement ingeniously lighted by one window high up in the angle of the room, which was devoted to the exclusive use of the pupils and such improvers who could not be accommodated in the main office. It is true its lighting was somewhat deficient, but Mr. Cadger reverenced the past, and it was against his principles to alter the work of bygone times unless he did so as the direct outcome of a professional commission, in which case duty overcame inclination. Cleanliness is next to godliness, and because this lesson should be early learned the two youngest pupils were given the task of washing down and cleaning the offices and fetching coals from the cellar. The principal's room was warmed by a coal fire enclosed by a handsome pitchpine mantelpiece of which the numerous step-chamfers were happily picked out in red paint; the two other rooms were heated with ingenious coke stoves of antique form, which gave or withheld heat with a delightful uncertainty.

Cribb watched the chief assistant as he worked out the inner mysteries of a pair of villa residences, having ambitious fronts of white brick relieved by red stone dressing, quiet and discreet back elevations, and a slate roof on the summit of which a cast iron cresting boldly defied the antiquated precedent of past ages. The improvers were expending their energies in tracing other masterpieces of design. Cribb hears the rustle of papers and the opening of many envelopes by his master, who had entered the inner sanctum from his private stairway, and then the issuing of sharp, authoritative commands, after which he was summoned into the great man's presence. Mr. Cadger eyed the new pupil with Jove-like majesty. "You want to be an architect; the first step is to learn the rudiments. Begin firmly at the bottom of the ladder and in time you may rise to the top. Mr. Makeshift, my chief assistant, will give you your instructions." Cribb then left the presence and stood at the corner of Makeshift's desk until he turned round and took Cribb into the pupils' rooms, asking whether he wrote a good round hand.

Now Cribb was proud of his calligraphy and had in fact won a prize for writing in the past, the only prize ever allotted to him, so he counted himself lucky to have a chance of showing what he could do. Furnished with a sheaf of foolscap, a new steel pen, and a capacious inkstand, Cribb was then supplied with an old specification and told to leave blanks for names and industriously commenced to tread the paths of technical knowledge. It is true he had a somewhat hazy idea of the meaning of terms, and that his fellow pupils were more concerned with ascertaining facts about his sisters than boring him with abstruse explanations, while the youngest pupil, in a quiet interval, acquainted Cribb with the fact that he had left his money behind him, and would willingly allow Cribb to lend him half a crown. This Cribb thought very friendly, and he instantly complied. Cribb learnt many things in the ensuing weeks. There were four stock specifications which covered the mysteries of all buildings, and Cribb's chief work was to copy these, leaving blanks which could be filled up in a few minutes. He learned to pot up Indian ink, mixing it with the requisite amount of oxgall, to sharpen the assistants' and improvers' pencils, where to buy the chief assistant's snuff, how to carry the instruments of surveying, exactly how Mr. Cadger liked his chops cooked, and other useful knowledge. Sometimes in Mr. Cadger's absence the staff indulged in extempore fights to strengthen their muscles for rubbing up inks, and in due time Cribb was initiated into the mysteries of tracing the chief assistant's masterpieces.

Mr. Cadger, like many of the great men of olden times, committed few of his ideas to paper. He explained his wants so tersely and well to Mr. Makeshift that the latter could always carry them out with satisfaction.

His time was fully occupied in searching for and obtaining work, in explaining matters to clients, and in sending out accounts for services rendered to them. He always referred builders to the chief assistant, having no time to go into the petty points which arise when there is a discrepancy between the ideals shown on drawings and the meaner difficulties of construction.

He was amply protected by ingenious clauses inserted into his specification, such as "carry out all works which may be directed by the architect whether indicated or otherwise." "all work is to be carried out in complete accordance with the architect's wishes." These expressions indicate the careful manner in which an architect can protect his clients' interests.

Experience had also enabled Mr. Cadger to considerably lighten professional labours which weighed heavily on more petty and fidgetty men of his calling. "What is a door but a door," he would say, and accordingly doors were never detailed. They were four panel or six panel doors of different thicknesses and had mouldings of different sizes, all mentioned in the specification. As all work had to be approved by the architect, if the work of the builder did not satisfy him it was promptly condemned, and all windows and other features were similarly dealt with.

Very handsome chimney pieces in many shades of marble could be purchased ready made from lists, and all that was requisite was an order from Mr. Cadger and everything was settled. Cornices, centre flowers, staircases and other features were dealt with in the same broad-minded, simple manner, which accounted for the immense amount of work which Mr. Cadger undertook.

In work of greater size and importance he frequently took in additional assistance. He did this partly from pressure of time, and partly because he usually thought at these times of some unfortunate genius who badly needed his help. For instance, when preparing plans for a magnificent town hall at G., a rising commercial centre, he gave employment to a skilful draughtsman who, after an afternoon's talk and dinner, was enabled to carry out his exact ideas. The town hall still stands, a monument to past method, and its lordly façade of pointed Gothic arches, with dog-tooth ornament and polished red granite pillars behind which are well-hung plate glass sashes, still delights the eye.

Its fine staircase, with the handsomest and heaviest cast-iron balustrading, profusely decorative in character, gives outstanding character to G., while the council chamber is a masterpiece of decoration in pitchpine and red and green plaster.

Before two years were over—and Cribb was articled for five—he had absorbed the lessons of his environment and mastered his principal's method. More than this, Mr. Cadger had given him the entrée into his domestic paradise, where Cribb, who was ever impressionable, was smitten by the charm and manifold attractions of Miss Amelia Cadger. The daring with which she could combine the brightest emerald greens and the richest magentas in a costume the size of her majestic crinolines, was but an appropriate setting for a face and figure which caused havoc among her numerous admirers.

Cribb would sit behind her at the stately Cathedral services, his mind sometimes unfortunately straying to earthly rather than religious matters; he met her quite unexpectedly at assembly dances, and together they executed the mysteries of the quadrille or happily conversed in the intervals of the valse. It is said that fortune favours the brave, but Cribb would hardly have dared to face his employer with a request had not an aunt of his unexpectedly bequeathed a legacy to him amounting to £800 a year. Armed with this solid fact, the lovers—for love had sprung up like a flower—boldly announced their wishes to Mr. Cadger. He explained to Cribb that though he had greater ambitions for his Amelia he would put them aside in order to procure her happiness, and he would further take Cribb into partnership in consideration of a payment of £400 a year for ten years for the purchase of a fifth share in his business. These terms being agreed upon the alliance was duly announced in the local press, and amidst a scene long remembered in X for its magnificence the happy pair were united.

The firm of Cadger and Cribb was one of the most notable of architectural partnerships. Each partner understood the other as well as the public in whose interests they unceasingly laboured; and if Cribb's sons, who both gained distinction at our oldest University, were sometimes a little critical of their father's methods and even inclined to decry his fame, they never achieved as much nor did they ever carry out work which gave so changed an aspect to many districts in a rural and hitherto backward country.

"Garden City Houses."

We have been informed by the publishers of the above book that Messrs. Lucas and Lodge were not the authors or editors of the book, but that their names simply appear on the dust cover as the architects of a house illustrated. The book is by no particular author, and is a collection of examples of domestic work of the garden city type. Whilst regretting our error, we still think Messrs. Lucas and Lodge could produce a very fine book on this subject.

BIRMINGHAM.—The Corporation are to erect two branch banks at Erdington and Springhill.—A school is to be erected at the Billesley Farm Estate at a cost of £14,900.

Book Notes

"Heating and Hot Water Work." By Frederick W. Dye. E. & F. N. Spon, 57 Haymarket, S.W. 6s. net.

This is a clearly written book, illustrated by 80 outline diagrams which clearly show the right and wrong methods of fixing hot water apparatus and their connecting circulations. It will be at once useful to the plumber and to those who have to examine plumbing work. Its several sections include hot water supply work, piping details and practices affecting efficiency and some unrecognised faults, central heating work dealing chiefly with details which may bring about failure and the manner in which unusual requirements may be met, combination hot water apparatus and the indirect method of heating water for tap supply, some details associated with steam boilers, gas boilers and their fixing. As almost the most frequent complaint made about houses can be said to be an insufficiency of hot water or difficulty of obtaining it without great expenditure of fuel, this subject is an especially important one, and it is well that it should be understood if we are to avoid subsequent trouble.

"The Walls and Gates of Peking." By Osvald Siren, Ph.D. The Bodley Head. Six guineas net.

From an architectural point of view this book is of great value. To-day we are seeking inspirations to guide us to a simplicity of external expression. Many of the illustrations should be of great assistance to the architect who is a designer. The Chinese character is ever present, but the masses suggest forms which can be applied to our everyday needs. Recently we heard Adelaide House described as an "Egyptian tomb." The only resemblance we can see to this is that the building has the appearance of durability. Adelaide House has come to stay in London for generations. In naval construction we can all remember the first Dreadnought that marked the beginning of a definite class or form of construction. Adelaide House will stand in history as the first definite expression of a new line of thought. Bush House is only in parts such an expression; the façade of this building in the Strand still retains many characteristic features of other forms of architectural expression which mar it from holding a premier place in the same sense as Adelaide House. Amongst the plates that attract our attention are the following: "The tower on the south eastern corner of the inner wall," "The south west corner tower," "Ping Tzumen, side view of the outer tower," "Ping Tzumen, the outer tower and stalls along the barbican wall," "Tung Chih Men, view through the gate," "Ch'ien Men, inner tower from the south," "Ch'ien Men, view through the inner gateway," "An Ting Men, the outer tower and the moat." These just seem to illustrate a wonderful simplicity and massive character. Naturally, their purpose demanded strength, and ornamentation and an elaboration of detail would have been out of place and a hindrance to the proper uses for which these towers were erected. But we do not view them in this light at all, but endeavour to see in their pure simplicity an inspiration for our own needs. Apart from the Chinese character displayed in their roofs, they might be massive buildings in any part of the world. The fact that their roof construction and design give them their character is in itself an idea worthy of some thought and consideration. The new London County Hall owes everything almost to its roof, which has always saved the building, in our opinion, from being commonplace and without character. But as it is, we always linger whilst passing, and admire its simplicity and beauty.

"The British Journal Photographic Almanac and Photographer's Daily Companion." Henry Greenwood & Co., Ltd., 24 Wellington Street, Strand, London. 2s. paper; 3s. cloth, net.

The volume contains a number of useful reviews of some of the new apparatus and materials that have recently made their appearance in the photographic world. A series of short articles dealing with the properties of the chemical substances chiefly used in photographic processes are also included. Some very useful and comprehensive information is available in respect to exposures. This has been arranged in tabulated form and applies to all latitudes. The subjects dealt with come under the following list: Foreground, street scenes, outdoor figure subjects; landscapes with light foreground, lake, river and beach scenes. Sea clouds and sky. Subjects with extra heavy foreground—*e.g.*, dark trees, doorways, groups; under trees, woods, avenues, glades, etc. Portrait in average well-lighted room. The above are given in Table I, and will give a very good idea of the value of this and much other useful information which is included in this most inexpensive publication.

The Problem of the Cathedral.

By Katherine Esdaile.

The "Church Times" recently had a leader on the subject of the proper use of the cathedral which, following on the memorable article on Chester in "The Times," is accompanied by a letter stating that our cathedrals " will never be houses of prayer until (1) all charges are abolished ; (2) monuments and tombstones are removed ; (3) stations of the cross, and pictures and statues of saints and other objects of devotion substituted." The writer's fourth point may for present purposes be omitted.

It is undeniable that the position is a difficult one, and it is not made easier by a one-sided statement of the facts. If the primary object of a cathedral is worship, the second is the inspiration of the visitor, the opening his eyes to the thought that he is a citizen of no mean city, that the past is there embodied, and that it belongs to him. To say, abolish all monuments is easy ; but what would the consequences be ? The shell of the cathedral would remain ; its stones would bear witness to the growth and piety of centuries ; but if monuments are to be abolished, where should we begin ? Are shrines to go ? Certainly not—one can almost hear the indignant answer ; to do away with that of Edward the Confessor at Westminster, with that of St. Frideswide at Oxford, would be vandalism without excuse. But what of the chantries of William of Wykeham at Winchester, of Arthur Prince of Wales at Worcester ? They are at once monuments and chantries ; are they to disappear ? What of the chapel of Henry VII. ? Without its effigies it would be shorn of all its interest, and stand a mutilated witness of the barbarism of the age which could destroy them, Oddly enough, one cathedral, Peterborough, has been so deviscerated by the virulent iconoclasm of the Puritans that it almost fulfils the ideal of a cathedral without monuments. Nine visitors out of ten will exclaim at its bareness ; nor does the absence of monuments at all lessen the flow of guides and visitors. Do we in fact want our cathedrals visited only for purposes of devotion ? Is it not much to have in them also an epitome of the past ? Is the emotion stirred by the sight of the Black Prince's armour an ignoble one ? Are we the worse for looking on the broken-nosed effigies at Gloucester and remembering that Pepys noticed with regret the vandalism perpetrated by Cromwellian soldiers twenty years before his visit ? Do these things not rather rouse the sentiment of reverence, of kinship with the past, for which new countries long and for which they visit England ?

It has often been suggested that Westminster Abbey should be cleared of its monuments, and fifty years ago a number were mutilated in the interests of Gothic to an extent little suspected to-day. Should we be the better for the absence of the national memorials of Chatham and Pitt, of those put up by private benefactors to Milton, Ben Jonson, Spenser ? Should we not lose far more than we should gain ? There are other Gothic cathedrals in Europe : there is only one Westminster Abbey, and in it we can follow, step by step, the course of our national history, our national appreciation of art and poetry and music. Are such things better away ? Is not the religious instinct itself deepened and strengthened by the consciousness of the great past, by the sense of the unity of life to which the Abbey witnesses as it does in the passing of the lives which make up that great whole ?

And if these things are to be left they must be shown. The ideal, which prevails in more and more cathedrals, is to leave the visitor to find his own way if he so wishes, and to provide expert help if help is needed. The old-fashioned compulsory shepherding by a verger intent upon his own importance as showman is a nuisance as intolerable to the devout as to the archæologist ; and the way out of the dilemma has been shown by the Dean of Chester and followed up by other cathedral bodies. Abolish fees ; allow all visitors access to all parts of the cathedral, the library and dangerous staircases excepted ; have vergers at hand to help and direct as is desired ; but leave the visitor alone until he asks for aid. But lay no hand upon the past. Whether pride or love or national homage prompted the erection of monuments and tombstones, let them alone ; and at all costs keep out the art of the Place St. Sulpice. To substitute a statue of St. Paul for that of Dr. Johnson would be to insult the memory of the English dead who gave it to St. Paul's. It is a bad statue, what then ? It is the expression of the national homage to one of our greatest men, and if Reynolds erred in demanding classical costume from the sculptor, we have no right to interfere. What if, in the words of Horace Walpole's friend, General Conway, in 1759, " Vice and insignificance have entitled men to a grave in the Abbey " ? Are we therefore to destroy their monuments, to constitute ourselves their moral censors, and to protest that they shall go ? One of the very monuments to which Conway was alluding aroused John Wesley to a deep sense of religious emotion ; the fact is recorded in his Journal, and may give us food for thought. The modern cry is for visible aids to devotion ; if the monument to General Hargrave was an aid to Wesley's devotion, can it utterly have failed ? Did it not, in fact, at the time of its erection, fulfil the very purpose for which statues of the saints are now demanded ? And who shall say whether, in another hundred and fifty years, such statues will not seem as remote from contemporary religious emotions as Hargrave's monument to-day ?

Nothing is so little permanent as taste, especially taste ecclesiastical, and destruction wrought in the name of Heaven recoils on the destroyers. Let us remember Wesley, and realise that that which is anathema to one age is a source of inspiration to another. The religious objection to monuments is therefore invalid, the artistic equally so, and on the same ground—the fleeting character of taste. Each generation must express its thoughts of death and immortality in its own way ; to do otherwise were to insult truth and the God of truth, to arrogate to ourselves an infallibility of judgment which experience shows to be absurd, and to violate the teaching of the past and that most purifying of emotions, the proud humility engendered by the sight of a great religious building enriched with the names and effigies of the dead.

The Royal Sanitary Institute.

The Henry Saxon Snell Prize.

The subject given for essays in competition for the Henry Saxon Snell Prize in 1924 was " Improvements in the Sanitary Conditions of Underground Dwellings and Small Underground Workshops." Eleven essays were received, including one from Canada, and they have been brought under the consideration of the Council.

The Adjudicators appointed for the competition were :— Dr. William J. Howarth, C.B.E. ; Professor Henry R. Kenwood, C.M.G., M.B. ; Mr. H. D. Searles-Wood, F.R.I.B.A. ; Mr. A. Saxon Snell, F.R.I.B.A. ; Sir Henry Tanner, C.B., I.S.O., F.R.I.B.A.

Acting on the advice of the Adjudicators, the Council have awarded the Prize of fifty guineas and the silver medal of the Institute to Mr. E. Thomas Swinson, M.R.SAN.I. (Feltham), writing under the motto, " Cave Dweller."

Two of the other essays showed considerable merit, and the Council have decided to recognise this by making a supplementary award of a bronze medal of the Institute to each of the writers, Mr. Edward E. Barks, A.R.I.B.A. (London), writing under the motto, " Agenda Pro Bono Publico," and Mr. F. R. Jelley (Sutton), writing under the motto, " Plebs."

CAMBERWELL.—Houses are to be erected on the south side of Herne Hill by Messrs. Andrews & Peascod.

WARRINGTON.—The Borough Surveyor is to prepare a report as to housing by concrete and other systems.—Messrs. R. and S. Smith have prepared preliminary plans for erecting 228 houses on the Alder Lane estate. Plans passed : 9 houses, Lovely Lane, for Messrs. W. and A. Ashton ; extension, Palatine Works, Causeway, for Messrs. Fletcher, Russell & Co., Ltd. ; sub-station, Thelwall Lane, for Corporation Electricity Committee.

Art Galleries.

THE ROYAL EXCHANGE.

FLEET STREET AND LUDGATE HILL.

W. Francis Longstaff.

A New Gallery.

The Muchmore Gallery, 92-93 Great Russell Street, W.C.1, held their first exhibition from November 17-29. The pictures shown were the work of W. Francis Longstaff, late official War Artist to the Australian Government. Most of the subjects illustrated are views of London. We reproduce two—the Royal Exchange and Ludgate Hill, the latter showing St. Paul's in the distance. The offices of this journal are to be seen on the right in the mid-distance. A very realistic touch is given by the locomotive on the Ludgate Hill railway bridge. The tower of St. Martin's half-way up Ludgate Hill is rather wobbly and would, in our opinion, have been more effective if painted a little darker. The collection contained a view of Waterloo Bridge which some day may become of unique interest. The Royal Exchange and the National Gallery, with St. Martin's in the distance, were also two quite effective pictures.

The proprietors propose to devote a room on the first floor for future exhibitions, thus separating their business—the Russell Art Co., Ltd.—from the exhibitions proper. This step, it will be found, will have a great many advantages. We hope some of our architectural friends will make use of this gallery for showing their drawings and sketches. The situation is very good; so many professionals live in the immediate neighbourhood.

The Fine Art Society, Ltd., 148 New Bond Street, W.

An exhibition of hunting pictures by J. S. Sanderson-Wells is being held in the above galleries. As water-colour paintings all the pictures are very good. The artist has also selected a very wide range of hunting subjects. Possibly if seen in a private house one or two of these pictures would please us very much, but viewed in the above gallery there is a terrible sameness in the quality. The artist expresses his entire knowledge of technique in each picture with the result that except for the difference in the subjects the exhibition is rather wearisome.

Japanese Colour Prints at the British Museum.

Everyone interested in decorative art should make a special effort to see this exhibition which is devoted entirely to the fourth period of the Japanese development. All the prints exhibited are by Hokusai and his pupils. The master was born in 1760 and died in 1849. He was the pupil of Shunsho. During his long life he used many names in succession, Sori, Shinsai, Kako Hokusai, I-itsu, and others. The range of exhibits is very wide, and having regard to the fact that each year brought about a change of fashion, the quality of the different periods in which the artist and his pupils worked is very marked and varied.

Hokusai imitated Kiyonaga as every other artist had been prone to do. His New Year cards are remarkable for their delicate strength, but his landscapes are by far and away his best efforts and they rank as some of the finest designs in the world. These date from after 1820. The exhibition has been arranged so that number one represents the artist's early productions. No. 2, "A Group of Four Girls," is a wonderful piece of composition, simple in design and very decorative in arrangement, the colours are brown, red, green, yellow and black, all on the pale side. No. 7, "Girls Admiring Cherry Blossom," illustrates the talent of draughtsmanship in a very convincing manner. No. 10, "The Telescope," is interesting in many respects. One would like to know more about the story that must have been attached to this picture. Nos. 12–16, illustrate scenes from the play called "Chushingura," founded on the true story of the loyalty of the forty-seven disbanded retainers, called Ronin, who avenged an insult to their feudal Lord and then all committed suicide. These compositions date about 1798, quoting from the catalogue published by Museum. No. 12, "Moronao and the Wife of Yenya, Act I," and No. 14, "Tonase and Konami journeying to Kyoto," appeals to us as the best designs in this group. No. 13, depicting Yoichibei killed by Sadakuro, is involved in composition, and the trees do not contrast in a happy manner from the background. No. 16, "The Last Fight in the House of Moronao," which the Ronin have taken by assault, Act XI, lacks in contrasting effects. No. 19, "Getting Water," is clever in drawing and composition. It is also interesting as showing the methods of the times and country. No. 20, "The Cottage by the Stream," might have been better titled, as gossip, the figures are full of expression and some very interesting topic of conversation must have been in progress, judging by their facial expressions.

Nos. 23, 24, 27, 28, illustrate the artist's work in quite a different style. The compositions are more elaborate and the figure drawing is perhaps on the naturalistic side. The colouring of No. 23, "A Lady with Two Maids Admiring the Garden," is delicate and in perfect harmony. No hard contrasting tones have been introduced in any of the four mentioned numbers. The water effect in No. 23 has been produced by the introduction of lines pressed into the paper, a very effective method seeing that a slight light and shade effect has been accomplished which adds considerably to the ripples on the water. No. 27 illustrates how the designer relies on the flat simple tones of different shades to bring out and accentuate the elaborate detail drawing that has been introduced into each of the figures; no attempt at modelling the colour tints and forms is apparent, except by the contour lines of the figures and dresses. These lines show a masterly knowledge of anatomy and drapery. No. 26, "A Girl and Her Lover," is beautifully drawn, though the general effect would have, in our opinion, been better had the landscape on the folding screen been kept in subjection. No. 24, "Fuji on a Spring Morning Seen Across the Water," The figures in the foreground are full of interest. The man is wearing a shawl or

wrap spotted with white dots; the result of their introduction is a delicate pearl grey tone, altogether charming. In fact, words fail us to render in any adequate manner the beauties of the majority of these prints. No. 29–31 are a group illustrating homely subjects such as "The Monkey Toy," "Okame, 'The Goddess of Mirth,'" "Kite-Flying," "A Young Man Going Home through the Snow," "A Girl Writing," "Children Playing with Ice at the New Year"—all good in every way. "A Girl Writing" is perhaps the best. In this picture a screen has been introduced which partly hides a second figure playing ball. That portion of this figure behind the screen is depicted in a shadowgraph manner, whereas the dress and feet that would be seen are expressed in their natural colourings. The whole shows a great appreciation for effective figure grouping.

Nos. 34–39, is another group illustrating the play "Chushingura." The artist has introduced greater contrasting tones in these pictures. The drawing is bolder. The scenes illustrated are certainly attractive by virtue of this increased strength. With No. 40 the style has again changed. "The Cruelties of T'Achi, Concubine of the Chinese Emperor Chou Hsin," is totally different to any other print in the exhibition. It illustrates one of the periods or styles in which the artist worked, but in no sense can we consider it as good as the others shown. Nos. 47, 48, 49 and 50 are portraits and they exhibit a vigour of line, the simplicity of which is surprising considering the delicacy and intricate work shown in many of the other exhibits.

No. 64—"The Carrying off of the Great Bell"—is decorative in design, the figures are treated in a conventional manner, the drawing is strong in character, and the colour tones have a graduating quality in places which greatly add to the charm of the print. The care that has been given to the drawing of the various details in No. 67 "Mitsui Shop in Yedo" is quite remarkable; the perspective does not seem to be quite correct, but this influences the general scheme only a minor way. No. 68—"Ryogoku bridge at evening" is fine study in blues and greens. No. 69, Fuji, in clear weather would have been better had the artist given us less of the fleecy clouds. No. 70—Fuji above the Lightning," has a quality and beauty which makes it stand out as one of the very best. No. 71—"Windy Weather at Ysjiri." The subject is clever and well drawn. No. 73—"The Timber Yard at Tatekama"—as a picture illustrating the methods used in stacking timber is graphic. We see a man throwing down and another catching the wood: a third figure is seen sawing planks. The artist would undoubtedly have us believe that this workman finds his duty arduous. As a picture the colouring commends itself to our notice: the pale red brown stacks of timber in the foreground and the deep blue sky in the background, broken up by a few houses and further stacks of timber in the mid-distance, make a delightful picture as a whole.

Nos. 78–85 inclusive are all devoted to the subject of waterfalls. It needs no comment on our part to emphasize the difficulties of illustrating such a subject by means of flat tones. The artist has called upon his talents for decoration and decorative effects to aid him in his work on this subject. All the eight prints must be judged from the decorative standpoint, and as such everyone will surely admit that the set represents a great achievement.

No. 79, "Fall of Roben," leaves no doubt in our minds as to the artist's intention. A stream is shooting down over sheer drop into a turbulent pool below, the surrounding landscape is of a woodland nature, on the right and left foreground may be seen timber dwellings and men seem to be bringing in logs out of the water, which possibly have been shot over the falls. No. 80 illustrates the overflow of a lake and the technique employed in representing the various natural details is very varied and successful. No. 81, "Fall of Yoro," This print illustrates the fall of a large volume of water into a chasm, from which may be seen arising the cloudy vapour, obliterating in many places the rocky cliffs from which the water is pouring in such a massive volume. We should describe this as the best of the group. No. 82, "Waterfall of Amida in Kiso Province." A turbulent stream is to be seen rushing towards a cleft in the rocks, from which it spouts over in one mighty rushing fall. Figures are shown seated on the grassy tops of the overhanging cliffs, these are coloured green, whereas the background is in deep blue and the stream in white and tones of pale blue, the whole is very striking. No. 83, "Fall of the Washing of Yoshitsune's Horse Yoshino." The artist depicts a stream of some size falling in cascades over grass grown boulders. A horse may be seen being vigorously groomed and washed by two active human beings. The whole is decorative in expression and as such very clever indeed. No. 84, "Kiri Furi Fall." This is on the same lines in composition as No. 83, only the water is falling in many streams and the fall is steeper. No. 85, "Waterfall of Ono." Here we have a miniature Niagara. A mass of water is depicted side view on, dropping from a great height; the vapour has been used in a very successful manner, lending a sense of mystery to the whole composition.

Nos. 103–109 illustrate flowers and birds beautifully drawn. No. 110, "Early Morning, Iwasa." This is a truly wonderful piece of colouring.

No. 115. The waterwheel at "Onden," is a curious picture. No. 119, Kanaya Ford on the Tokaido, illustrates a number of different methods of crossing the river.

No. 156. The Chinese Poet Po Chü-i, about 1830. The panel is very fine indeed, the texture and graduation of soft colour tones is remarkable in the extreme. No. 158. The Poet Su Tung-po in exile. The whites have been handled in quite a unique manner; the disposition of the figures in relation to the surrounding details is quite successful. No. 159. Nakamaro in Exile. It would appear that the artist has used the wood graining of his blocks so as to break up his flat colour tones, and thus give them an additional charm. This picture is very rich in tones and certainly ranks as one of the best in the collection.

The R.B.A. 162nd Exhibition at the Suffolk Street Exhibition.

It would be quite impossible to give a detailed review of this excellent exhibition, but, on the other hand, it would be equally unfair not to notice some of the outstanding pictures. No. 2, "A Cumberland Seaport," by J. Littlejohns, gives us a very truthful indication of the merits of exhibits, the lights and shades are telling, and the distances are well depicted. One would place No. 2 amongst the best pictures we have seen this season. No. 7, "St. Paul's and Tower Bridge from Greenwich," by A. H. Elphinstone, is a clever picture in every way except the choice of title. St. Paul's and Tower Bridge as so insignificant as to need searching out. No. 8, "The Albert Bridge, Chelsea," by Fred F. Foottet, is one of the set of pictures illustrating views of London, which will disassociate the hundred and sixty-second exhibition of the Royal Society of British Artists from any past shows we have seen or any future exhibitions we hope it may be our good fortune to visit. Many of the members have in the present exhibition contributed pictures which illustrate our capital, and as a record of how artists see and paint such pictures the present exhibition serves a very useful purpose. To-day we have many technical methods for painting. But in rendering views of London the artists have to remember that to most of us London is a very familiar place and when painting in an impressionistic or futuristic style, any well known building or view the artists have been forced to express the same in a recognisable manner. Mr. Foottet sees things blue, we cannot recall ever having seen the Thames, Albert Bridge, or the sky quite this colour. No. 14, "St. Paul's from the River," A. E. Bottomley. The cathedral is very difficult to draw, and the dome is difficult to render Having regard for the distances we think the West Towers are rather too large in comparison with the dome. The colouring is dull and uninteresting.

No. 19, "The Embankment," by Constance Bradshaw, is devoid of any feature by which the subject might be associated with London. The colouring has much that pleases, and is treated in a very simple way. No. 44, "Industry on the Outskirts of London," by Chas. Ince, represents a factory painted in all its ugliness. These buildings always obtrude themselves on the landscape. Mr. Ince gives us a picture cleverly painted, but one we should not like to possess. No. 47, "Waterloo Bridge," by Leonard Richmond, is unfortunate because it shows none of the surrounding features of London.

No. 112, "Whitehall," by Geo. H. Downing. This is a poor drawing, and we would remind the artist that some respect should be paid to the rules of perspective. We do not admire the scant manner in which the beauties of the Banqueting Hall have been rendered.

No. 113, "St. Paul's from Blackfriars," by W. Edward Riley, We should describe this picture as being feathered. We seem to have omitted a picture that apparently attracts a great deal of attention, No. 98, "Composition," by E. Grainger-Taylor. The subject illustrated is of universal interest, and might be said to be an episode in human life through which we all pass at one of our very earliest moments. As a picture No. 98 might have been painted by a child. It is altogether unworthy of any place in any exhibition.

No. 121, "Regent Street," by W. E. Willats, is a very clever drawing and painting, showing the Piccadilly Hotel façade, by Norman Shaw, in a sombre light, whilst opposite the new building operations are indicated in a simple manner. It might be better described as Regent Street, November, 1924.

No. 127, "Bridewell Hospital," by E. A. Cox. North-west view of the chapel and part of the great staircase leading to the hall of Bridewell Hospital, founded by King Edward VI. This picture is one of three very interesting water-colours. No. 221, "Izack Walton's House in Fleet Street," and No. 225, "Sir Richard Wittington's House in Swithin's Passage, Moor Lane," as it appeared in 1796.

One landscape of charming quality and refinement that attracts our attention whilst examining the London views is No. 143, "A Doubtful Morning," by Harry G. Theaker.

No. 148, "Duke of York's Column," by P. Lancaster, is well painted. A due regard to the architecture has been paid, and yet the picture is in no sense of the word less pleasing.

From our present view, of course, this attention to architectural details is gratifying. The same artists gives us in No. 166, entitled "Marble Arch," a truly delightful sketch full of interest. No. 164, "Old Chelsea Church," by W. F. Meason, is just a straightforward picture, and those who have purchased it will always, we are sure, be charmed by the colouring. No. 172, "In the Rain, London," Claude Flight. This is one of the very few pictures painted in the modern style, but we realise the discomfort of the people depicted, and in this instance the style assists us to obtain the correct impression of the artist's intention.

No. 181, "Study," by E. Grainger-Taylor, is on a level with the other picture we have noticed. If No. 181 has reached the study stage we have no idea of any previous stage in art as might be depicted by those who do not study.

Seven and Five Exhibition.

Mr. Wm. B. Paterson's Gallery, 5 Old Bond St., W.1

This small exhibition is full of varied interest. The whole gamut of styles is represented, though modernism predominates by virtue of its advertising qualities. Who could miss the first impression of wonder on seeing No. 1, titled "The Striped Jug," by Ben Nicholson. Is there such a paucity of material that it is necessary to paint a commonplace jug? Does Mr. Nicholson see nothing in nature to inspire him? Possibly not, judging by another contribution, No. 20, "Abstraction November." This picture cannot be described in any exact way, a few irregular squares forming an unbalanced mass. We are able to see and appreciate the aims of the cubist, futurists, etc., but No. 20, in our opinion, is asking too much of the public who visit the exhibition. Lena Pillico is showing a number of pictures. However we may lament the lack of drawing in the sense it is generally used, we can admire her ideas and colour schemes. "Life's Turmoil" is full of truth and action. "The Blessed" look rather bored. Mr. S. I. Hitchens has some fine pictures in this exhibition. No. 17, "A Sussex Twilight," is rich in tones and one may linger before this picture and permit the effects to impress themselves upon one's mind. If the modern style of painting were all of this quality we should welcome it. But we have sat in front of No. 5, a portrait by Mr. Ben Nicholson, and have been able to discover nothing beyond our first impression of surprise at the mental attitude that could convince him that this picture was worth showing at an exhibition. No. 42, "La Roche Guyon," by S. I. Hitchens, is another really fine picture, full of interesting details and expressing the talent of the artist in no mean way. We consider Nos. 31 and 33, "A Landing Stage on the Seine" and "The Gummfluh after Rain," a little too sketchy. Mr. P. H. Jowett is showing two masterly landscapes, very decorative in treatment and yet with just that leaning towards the naturalistic which make them understandable to all, even the most old-fashioned. Mr. Claude Flight is showing a number of his compositions. We cannot call them pictures, because a picture is a representation of something we know or can imagine. No. 30, "The Trawler and the Waves," by this artist is, perhaps, the most difficult to understand. Mr. Flight's vision in respect to "Trawlers and the Waves" suggests that he paints after a painful experience. No. 41, "A Street in Jerusalem," by the same artist, is another curious composition and is more suggestive of a flight into Egypt. We have noticed Mr. Alan L. Durst's work recently in our review of "Art Work."

"The Architect" Fifty Years Ago.

DECEMBER 5, 1874.

IMPROVED ADMINISTRATION AT THE INSTITUTE OF ARCHITECTS

We are glad to find that there is this year an appearance of better management at the Institute of Architects in one important particular, namely, as regards the ordinary fortnightly meetings. We can scarcely admit that the programme of promised papers which was issued at the commencement of the session is all that such a Society could be expected to offer; but experience shows that even this is almost a secondary consideration when sufficient pains are taken in another way. In a word, these are days of advertising and canvassing, and the only way in which to provide for that foremost of all essentials for a scientific meeting, a well-sustained discussion, is simply by procuring through private invitation the attendance of competent speakers. After the remonstrances which we have recently felt it to be our duty to offer with reference to other matters, it affords us special pleasure to express satisfaction with the way in which this indispensable system of special preparation for the ordinary meetings has now been introduced. On the occasion of the reading of the Paper on the Orwell Observatory three weeks ago it was evident that some trouble had been taken to secure the attendance of several gentlemen as experts in the astronomical question; but the nature of the subject was not quite favourable to the experiment. Last Monday evening, however, when the matter of discussion was Baulting, the repetition of the effort produced a satisfactory result, even although there was no Paper at all announced, but only a discussion on a prize essay of last session. Mr. West came to the front by reading some well prepared notes instead of merely making a speech; Sir Edmund Beckett, better known as Mr. E. B. Denison, had a good deal to say that was very interesting from that peculiar point of view which in scientific matters is all his own; Mr. Brewer, the distinguished draughtsman of picturesque Continental architecture, was also ready with some well considered recollections of travel; and in addition to these strangers the members of the Institute themselves were by no means behindhand. The consequence was that the meeting, which but for such little preparations might have subsided into silence after half-an-hour's forced and desultory talk, became interesting and animated, and the debate was brought to an end with some difficulty long after the prescribed time of closing the sitting. One speaker even threatened to re-introduce the subject on a future occasion, and indeed met with a little encouragement; and it is pretty certain that Mr. Eagles, the essayist in honour of whose dissertation the discussion was held, had to be prevented by the *force majeure* of a hint from the chair from completing certain supplementary remarks which he was prepared to offer. All this is just what ought to be; and we have no hesitation in saying that if proper means be taken to provide *debate* at these fortnightly meetings—which after all are the chief practical work of the Society—a full attendance on every occasion, such as distinguishes the Institution of Civil Engineers, will soon become matter of course; when all difficulties, financial, personal, or whatever else they may be, will speedily disappear in the palpable prosperity of vigorous life. It may take a session or two to bring up the attendance to what one would wish, but so soon as the members are made thoroughly to understand that every meeting will be properly prepared for beforehand, the evidences of revivification will begin to appear. We are pleased to see that one clever contributor, Mr. W. H. White, is to read the next Paper, on the subject of the Inspired Workman of the *Quarterly Review*, when we hope Mr. Eastlake may amongst other things be able to secure the attendance of the talented discoverer of that *lusus naturæ*.

The A.A. Pantomime.

Architectural Association students' pantomime, entitled "Guffaws, or The Double Elephant and Castle," will be performed at 8 p.m. on Wednesday, Thursday, Friday and Saturday, December 17, 18, 19, and 20, with matinees on the Thursday and Friday at 2.30 p.m., in the Galleries of the Royal Institute of British Architects (9 Conduit Street, Regent Street). Tickets: 3s., 5s. 9d. and 8s. 6d., including entertainment tax. Applications by letter or personally to: Miss Rigg, 34 Bedford Square, W.C.1. (Telephone: Museum 4957. 10.30 a.m.—5.0 p.m.) Money must be sent with applications for tickets. Confirm by letter all seats booked by telephone. Make cheques payable to Architectural Association. Avoid changing seats already booked after December 10. Profits in aid of the Architects' Benevolent Fund.

Legal News.

In the King's Bench Division on Wednesday, before Mr. Justice McCardie, Mr. Ernest Wm. George Sonster, architect, of 3 St. James's Street, W., sued Mr. A. S.Freeman,of 321 Vauxhall Bridge Road, for £602 odd for professional services rendered. The suit was undefended. Plaintiff stated that in June of this year he was engaged to prepare plans for a hotel, and the whole building was to cost £160,000. There were suggestions made for additional decorations to the building which would have considerably added to the cost of the plans. He had only claimed on the ordinary scale of the R.I.B.A. Schedule,which was in this case a reasonable charge. His Lordship gave judgment for plaintiff with costs.

The offices of the St. James's Advertising and Publishing Co. have been moved from Gresham House, 24 Old Broad Street, to Portland House, Tothill Street, Westminster, S.W.

Memorial Art in Churchyards and Cemeteries

In appointing a committee to inquire into the present position of the Art of Churchyard and Cemetery Memorials the British Institute of Industrial Art undertake the consideration of a subject that has been sadly neglected. It needs but a walk through a country churchyard—or, better, a cemetery—to realise how great has been this neglect of the æsthetic aspect of modest memorials, and it would no doubt prompt the feeling that the inquiry has not come too soon.

It was not until the beginning of the eighteenth century that small gravestones were extensively used. Before that time all except wealthy and notable people had the simple mound without indication of who rested beneath the spot. The early eighteenth century stones were generally of tasteful unobtrusive design, usually artistically superior to the elaborate memorials erected inside the churches at the period. This was, I suspect, because their extensive use was something new and they consequently possessed the freshness and interest of an art in its youth. Their ornamentation consisted of simple swags, cherub heads, scroll effect outlines, and such like devices, arranged gracefully in the design. They, like the church itself, were constructed of a local stone, and the association was therefore particularly happy. As reverent care was exercised in tending the churchyard, it acquired, with its modest gravestones and yew trees, a peacefulness and harmony that awoke the famous elegy in Gray and stirred the love and imagination of a poet of our own day. But all this is changing. White marble and red granite, heavy urn monuments and hideous pseudo-Gothic headstones have invaded these sanctuaries where the spirit of restfulness once prevailed.

To observe modern memorials at their worst, however, it is necessary to visit a cemetery, for with a churchyard there is often, fortunately, the restraining influence of a judicious incumbent. In cemeteries monstrosities abound at every glance. There are many commercial varieties, but few with any artistic excellence. There is the already-mentioned Gothic headstone, flattened at the top, with passion flowers, lilies or roses indiscriminately worked in as ornament, heavy swags of flowers, a dove perhaps perched on the point of the arch and the work constructed in lurid white marble, the whole being conceived with not the least appreciation of the devotional character of Gothic architecture. Another common form is a crude imitation in marble or red granite of a Celtic cross. Another shows large masses of the usual symbolic flowers dangling round a cross on three heavy bases, large enough to allow space for long tributes to deceased virtues. When one reads these tributes it is difficult not to remember the close of the "Bride of Lammermoor" that speaks of the end of Lady Ashton, who was the cause of all that terrible tragedy: "A splendid marble monument records her name, titles and virtues, while her victims remain undistinguished by tomb or epitaph." Better, perhaps, to let an individual's life speak for itself.

In the usual form of inscription the letters are of lead, which, being black, have a crude effect on white marble. How much more pleasing is their effect on material of softer hue, such as Hopton Wood stone. The only prospect of these cemetery memorials ever giving the slightest æsthetic satisfaction is during their period of decay when the relatives who erected them are long since lying under similar monuments. In Kensal Green cemetery are some of the loveliest spots in London; in the older parts, though, where the marble has turned a dirty grey with age and the trees spread their branches over the graves in the autumn, sprinkling with yellow leaves the grass round the stones. But we have had to wait until age has dulled and corroded the surface of the marble and made the designs hardly distinguishable.

Why, it might be asked, should this be so? It is largely because the artistic value and significance of the modest memorial ceased to interest, and the consequent apathy has allowed this industrial art to drift and be controlled almost entirely by mere commercial speculators. This apathy is also detrimental to our industrial interest. I have insinuated that memorials of the local stone are more in harmony with their surroundings than white marble. It is hardly too much to say that the latter are not, under any circumstances, desirable in a churchyard. Many can doubtless remember wandering into a country churchyard and feeling how restful was the scene, the dull grey headstones against the dull walls of the church being in perfect harmony, when suddenly at a bend in the path there appears a glaring white marble memorial. There are many such instances, and to produce them Italians quarry and carve the memorials at Carrara and send them to England all ready for erection. In Italy labour is cheap and a monument can be produced a little cheaper than it could be if made in a local stone. That is the argument of the commercial speculator.

Italian carvers continually working on repetitions of stereotyped ornament have become excellent and rapid machines. There are fewer, much fewer, English craftsmen engaged in such work and yet there are many who desire even this sort of employment. There was an instance last year of an elaborately ornamented memorial ordered from a firm of marble merchants with the stipulation that it was to be carved in England. The firm had depended so much on Italian workmen that it advised the client to have the work carved in Italy, as there it would probably be done much better. But the client was resolved on English work. The firm had a carver in its employ who was obviously unequal to it. No intelligent attempt was made to get a more competent craftsman. As might be expected, the client was dissatisfied and required the work to be done again. On this occasion the firm's persuasions prevailed and the memorial was made in Italy.

The appalling designs, however, constitute the greatest of the evils at present afflicting memorial art. Design is in the majority of cases devoid of all significance and artistic value. And yet it is not difficult to imagine a tendency in this direction towards something better than has ever existed before. Better even than those of the early eighteenth century, for however much those may please by restful harmony with their surroundings, they cannot individually be ranked highly as works of art. There are illustrations of recent headstone designs of a high order in Sir Lawrence Weaver's excellent work, "Monuments and Memorials." They show what might be done.

A memorial should satisfy two requirements: firstly, that it should be significant, expressing by symbols or representation something appropriate to the departed; and secondly, that it should be beautiful, that it shall enshrine a memory in a form that shall be pleasing to the living.

There is also the happy and tasteful arrangement of memorials in a cemetery or churchyard which is the business of the vicar or cemetery authorities. It is fraught with difficulty, but it is surely a pleasurable task, but should never be that of one who is not a lover of nature and art. A pleasurable task, for should not the graveyard be regarded as a garden wherein we take our rest? And the more beautiful it is the gentler and more reverent thoughts will it inspire in the living. True culture must always bring with it a reverence for the beautiful. The most respect-inspiring cemeteries I have seen were the temporary ones during the war, composed of little wooden crosses rising up in groups on the hillside or on the borders of a wood.

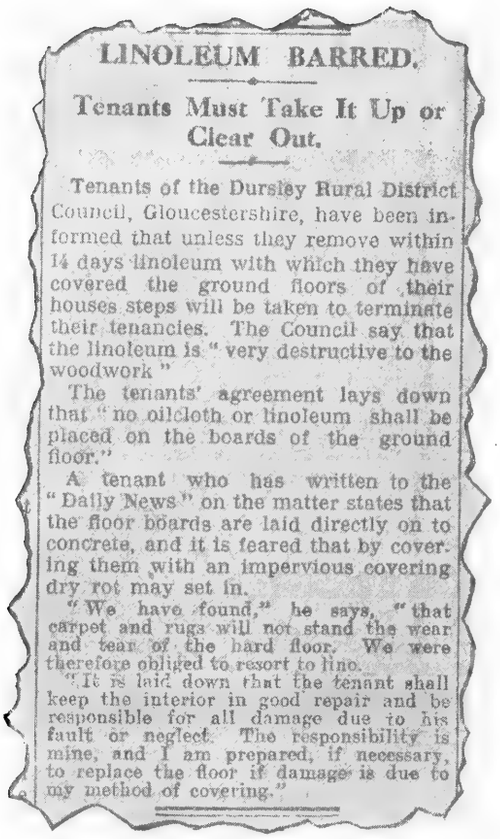
ARNOLD WHITTICK.

In connection with the proposed erection of a technical college and school of art on a site in Howard Street, the Rotherham Education Committee recommend that architects be invited to submit competitive designs, premiums to be £200, £100 and £50. It is suggested that an Assessor should be nominated by the President of the R.I.B.A.

MANCHESTER.—Additions and alterations are to be carried out at the Monsall Hospital at a cost of £2,300.—The Gorton Brook Hotel in Clownes Street is to be reconstructed.

LINOLEUM AND DRY ROT

Cutting from Daily Press, 30/9/24.



LINOLEUM BARRED.

Tenants Must Take It Up or Clear Out.

Tenants of the Dursley Rural District Council, Gloucestershire, have been informed that unless they remove within 14 days linoleum with which they have covered the ground floors of their houses steps will be taken to terminate their tenancies. The Council say that the linoleum is "very destructive to the woodwork."

The tenants' agreement lays down that "no oilcloth or linoleum shall be placed on the boards of the ground floor."

A tenant who has written to the "Daily News" on the matter states that the floor boards are laid directly on to concrete, and it is feared that by covering them with an impervious covering dry rot may set in.

"We have found," he says, "that carpet and rugs will not stand the wear and tear of the hard floor. We were therefore obliged to resort to lino.

"It is laid down that the tenant shall keep the interior in good repair and be responsible for all damage due to his fault or neglect. The responsibility is mine, and I am prepared, if necessary, to replace the floor if damage is due to my method of covering."

A SOLIGNUM stained wooden floor is proof against decay—including dry rot—even if embedded direct on to concrete and overlaid with linoleum.

When a floor is to be covered with linoleum use Exterior Solignum.

A 2/6 tin of Exterior Brown Solignum is sufficient for an ordinary floor — apply liberally with a brush — no heating — no preparation—leave 24 hours and rub down briskly with a cloth. The linoleum can then be laid.

A tin of Solignum is cheaper than a cartload of timber.

If you have any trouble, write to us.

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Wood Preserving Stain, 18 Colours.

R.I.B.A.

Notes from the Minutes of the Council Meeting, November 17, 1924.

Architectural Copyright.

On the recommendation of the Practice Standing Committee, it was decided to inform the Board of Trade, in reply to the Board's request for the observations of the R.I.B.A. as to the desirability or otherwise of introducing legislation for the purpose of setting up a Statutory Register of Copyright, that in the opinion of the Council it is desirable that legislation should be introduced for the purpose of setting up a Statutory Register of Copyright, provided that assurances are obtained that the rights granted under the Copyright Act of 1911 are not affected in any way.

Richmond Bridge.

Reports were received from the Art Standing Committee and the Town Planning Committee on the subject of the proposed widening of Richmond Bridge, and it was decided to take steps to call the attention of the authorities concerned to the undesirability of widening the bridge and the necessity of a broad consideration of the whole question of new bridges over the Thames outside the County of London.

British Architects' Conference, 1925.

On the recommendation of the Allied Societies' Conference, the offer of the Northern Architectural Association to organise the Conference in their province in 1925 was cordially accepted.

General News.

AYLESBURY.—The Bucks County Council have under consideration proposals for the provision of an institution for mental defectives.—The provision of accommodation for the county staff is also under consideration, one suggested scheme involving an outlay of nearly £60,000.

BANSTEAD.—The L.C.C. have accepted the tender, £24,263, of Messrs. W. H. Gaze & Sons, Ltd., Kingston, for the modernisation of the male blocks at the Mental Hospital.

BARKING TOWN.—The Urban District Council have agreed to give the subsidy to Messrs. E. H. Glenny & Son in respect of 14 houses to be erected in Norfolk Street.—Plans passed: factory, London Road, for East London Cold Storage Co., Ltd.; 26 houses, Faircross Estate, for Mr. C. Gray.—Messrs. Fasey & Son, Ltd., are to build 49 houses in Movers Lane.—Estimates are to be obtained of the cost of a new welfare clinic.

BERMONDSEY.—Twelve shops with flats over are to be erected in Tower Bridge Road by Messrs. North, Robin & Wildson, architects for Messrs. Edward Mortimer (London), Ltd., 9 New Bridge Street.

BOLTON.—The Education Committee have decided to erect a school in Devonshire Road at a cost of £14,000.—The Borough Engineer has prepared plans for extensions to the fire station.—Subsidies have been voted for houses to be erected as follows: 12 houses, Kirkby Road, for Mr. W. Yates; 8 houses, Hughes Street, for Mr. William Draper.—Plans passed: 12 houses, Rydal Road, for Messrs. G. Temperley & Son; 43 houses, Singleton Avenue, for Messrs. Gornal & Son; bus station, Salop Street, for Tramways Committee; lay-out plan, off Devonshire Road, for Messrs. Jackson & Sons; 8 houses, Devonshire Road, for Mr. J. Uttley; 4 houses, Church Road, for Mr. N. O. Halliwell.

COULSDON AND PURLEY.—Plans passed: 8 houses, Selcroft Road, for Mr. F. Brown; 7 houses, Purley Hill, for Mr. J. P. Oldaker.

GLASGOW.—In connection with the experimental houses of various types being built at Govan, the Corporation have agreed that three blocks be built of the building material manufactured by Messrs. Fife-Stone, Ltd.

GRAVESEND.—Plans passed: 6 houses, Sun Lane, for Mr. W. Barton; 6 houses, Parrock Road, for Messrs. Hopkins & Sons.—Additions and alterations are to be made at the post office and the telephone exchange.

ILFORD.—Plans passed: 5 houses, Hatch Lane, for Mr. W. Butcher; 18 houses, Kingston Road, for Sunnyside Development Syndicate; 30 houses, Brancaster Road, for Mr. Fortescue; church, Broomhill Road, for Messrs. G. Baines & Co.; 24 houses, Talbot Gardens, for Mr. F. Hitchcock; 17 houses, Cavenham Gardens, for Mr. Barwell.

MARYLEBONE.—It is proposed to erect a synagogue on the site of 28 St. John's Wood Road.

MORECAMBE.—The Education Committee have decided to erect a special subjects school adjoining the Duke Street School.—Plans passed: extensions at cinema, Queen Street, for Queen Cinema Co.

NEWCASTLE.—Arrangements have been made for the Newburn Council to construct the proposed subway at Lemington.—Messrs. W. Wood & Co. propose to erect a block of business premises in Pudding Chare.

OLDHAM.—Plans have been prepared for a new block at the Westhulme Hospital to cost between £4,000 and £5,000.—The Health Committee are to consider the provision of a public abattoir.—Plans passed: Lilac Mill, Ltd., clearing of buildings off New Street and rebuilding to New Street line, Lilac Mill, Fulwood Road.

PETERBOROUGH.—The Corporation have promised the subsidy in respect of 10 houses to be erected in Grange Road by Mr. R. S. Jellings.

ROTHERHAM.—The Eastwood Miners' Welfare Committee are to erect a hall on land at Far Lane.—The Housing Committee recommend the erection of 500 houses on the Far Lane Estate.—A new service reservoir is to be constructed at Kimberworth.—Plans passed: Rebuilding Cleaver Hotel, Wellgate, for Messrs. Tennant Bros., Ltd.; pavilion, Holmes Mills, for Messrs. Habershon & Sons; institute, Meadow Hall Road, for Miners' Welfare Committee.

SHIPLEY.—The Surveyor of the Urban District Council has prepared a scheme for the conversion of Farr Royd into a child welfare centre at a cost of £2,710.—Plans passed: 34 houses, Gaisby Lane, for Mr. Dalby.

SMETHWICK.—Plans passed: 12 houses Bertram Road, for Mr. W. Lees; pavilion, Bearwood Road, for British Pens, Ltd.; sub-station, Cape Hill, for Electric Power Co.; extension to works, Rolfe Street, for Messrs. James & Co.

WILLINGTON.—The Urban District Council have prepared a scheme for erecting 60 houses.

WIMBLEDON.—A site in South Wimbledon is to be purchased for the erection of 14 houses.—A site is to be purchased for a day nursery.

YORK.—Consent has been given to the erection of a factory by Messrs. Joseph Terry & Sons, Ltd., on a town planned area.—The Ministry of Health have sanctioned a contract with Messrs. F. Shepherd & Son, for the erection of 300 concrete houses at Tang Hall, for £146,262.

Trade Notes.

Painting Over New Portland Cement.

The principal difficulty experienced in the use of new Portland cement, concrete or plaster on interior walls is that if the wall is immediately covered with paint or distemper the decorative material discolours and peels off. This is due to the fact that, whilst cements and plasters are undergoing the chemical action of setting, free alkali in the form of calcium hydrate is exuded, and this salt not only tends to destroy the pigment, but also saponifies the oils used in the paint. Owing to this saponification, the decorative material is easily removed from the wall, and wallpaper applied over new Portland cement or plaster will discolour.

Used for many years as a first class coating before painting over brickwork, etc., Nepthelene Solution (manufactured by Messrs. Jenson and Nicholson, Ltd.) has been adapted to overcome the difficulty, and has proved thoroughly satisfactory in a wide series of tests by builders, contractors and decorators. It is now regularly in use as a commercial product.

The principle of Nepthelene is that it is non-saponifiable, and if such a coating is placed between the material which causes saponification and the decorative material which would saponify then complete protection is obtained.

As it is imperative that a continuous coat be obtained to hold back the alkali, Nepthelene is coloured a faint blue to enable the operative to achieve this (the blue is specially made to fade out in the course of a day or so.) Nepthelene will dry overnight and two coats are usually essential, the first coat sinking in and the second coat forming a film over the wall.

It adds very little to the cost of decoration. The price to builders, contractors and decorators is 13s. 6d. per gallon. One gallon covers approximately 90 to 100 square yards at a cost of 2d. per square yard per coat, and it can be used with safety even where cement has been treated with waterproofing products, such as Pudlo, Ceresit or Prufit, etc.

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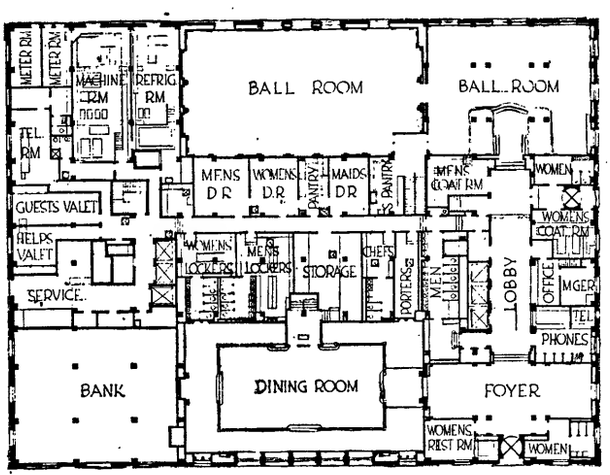
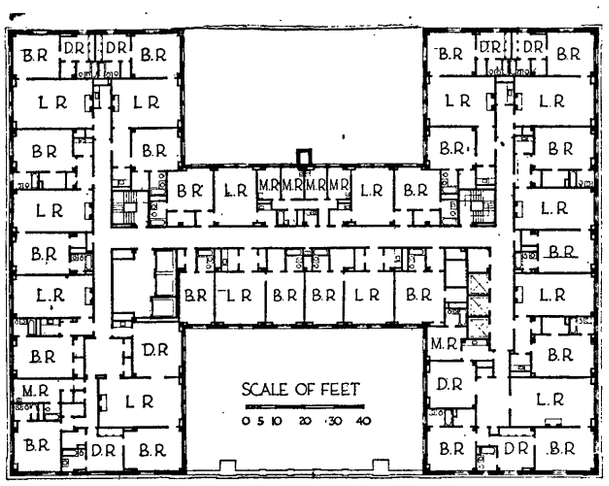
American Apartment Houses.

THE BELMONT HOTEL, PARK LANE. SCHOLTZE & WEAVER, Architects

In America it seems quite likely that another 15 or 20 years will see the complete abandonment of the individual town house in favour of grouped dwellings or "apartment houses," the change being due to the cost of maintenance and service difficulties. The New York Building Code defines an "apartment hotel" as being any building in which the rooms are laid out as suites of apartments and the meals served from a main kitchen.



GROUND FLOOR PLAN

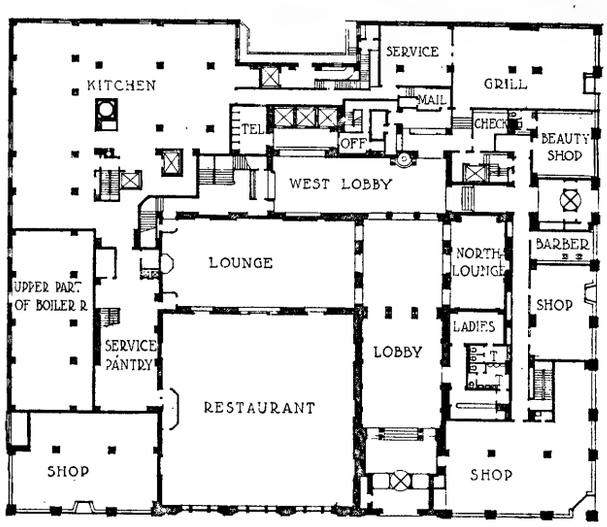


TYPICAL FLOOR PLAN

The best plan for such buildings is found to be a three-side court, the wings facing, which are wide enough to admit of rooms being not less than 20 feet, and not more than 25 feet deep, with corridors of 6 feet or 7 feet wide between them.

Each set of apartments in Park Lane are of the more recent Apartment Houses, includes an ample service pantry, with refrigerator, warming oven, sink and china closet, and a constant change of air is ensured in each pantry by mechanically operated vents, while they are so located that waiters do not have to pass

BELMONT HOTEL, CHICAGO. FUGARD & KNAPP, Architects.



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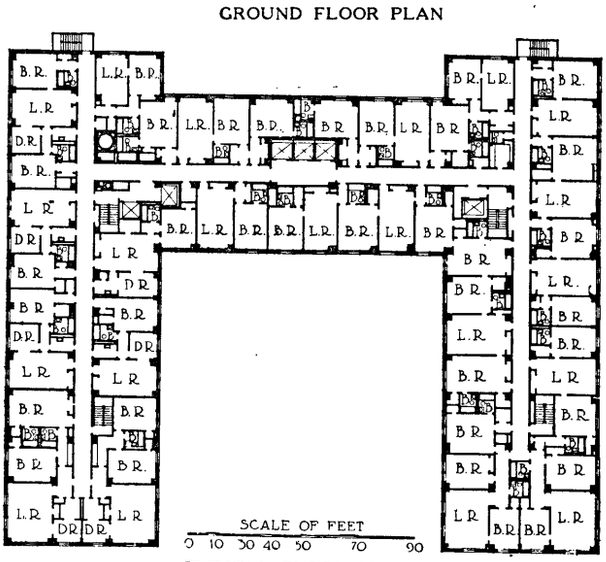


TYPICAL FLOOR PLAN

through apartments in bringing in food. On each floor is a general service room centrally situated. The greatest demand is for small suites consisting of one living room and one or two bedrooms.

"Disappearing" beds are popular.

Larger suites consist of a private foyer, living room, dining room and two bedrooms. The Park Lane building includes boudoirs or dressing rooms, which are found to be very popular, and main closets lighted by a window, with room enough to store a trunk in, with space to walk round it. A closet should contain room enough for 20 dresses or suits, and at Park Lane boot shelves are also given. The provision of lifts amounts to one for every 150 rooms, and dining room space is arrived at by calculating the number of inmates and guests and allowing 10 feet of floor space for each. The kitchen should be placed, wherever possible, on the same level as the dining room and closely adjacent thereto. If space cannot be afforded for general laundry, a space should be allotted for a small one, where the tenants' servants can carry out washing which it is not desirable to send out.

The restaurant is a difficult problem, as in order to show any profit it must obtain outside patronage in some manner. From a financial point of view planning is the key to rental appeal and profits, while the nature of the specification can ensure against costly maintenance and depreciation charges, and good layout and equipment will minimise operating costs.

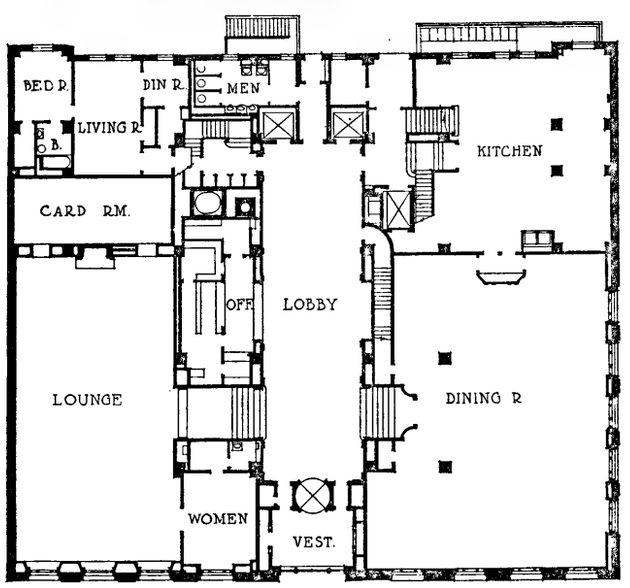
In the Belmont Hotel, at Chicago, the unit is 4 or 5 room suites, each having a large living room, small dining room and kitchenette, 2 or 3 bedrooms and a bath room.

The Lake Shore Drive Hotel, at Chicago, consists of 180 suites, varying from 3 to 8 rooms, or 420 rooms in all. The dining room seats 120, or rather less than one-half of the tenants; the cost of construction was about 4s. a cube foot.

In the Huntingdon Apartments, San Francisco, the number of suites is 140, varying in size from 1 to 6 rooms; no general dining room is provided, and servants are provided by the management, who charge for their services per hour.

In the Alcazar Hotel, at Cleveland, the number of suites is 175, varying from 1 to 6 rooms each, and 88 suites have kitchenettes for the use of servants. The building, erected in 1922, cost 3s. 6d. a cube foot.

THE LAKE SHORE DRIVE HOTEL.
FUGARD & KNAPP, Architects.



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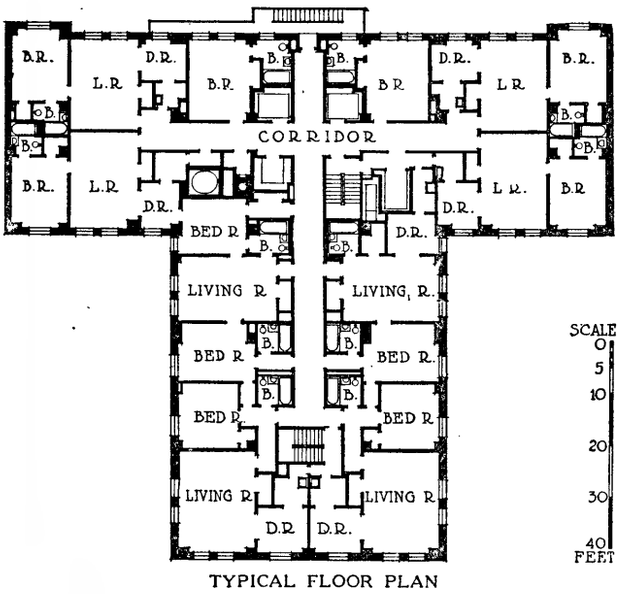


TYPICAL FLOOR PLAN

The two basic methods of construction are steel frame and reinforced concrete, the former being generally preferred on account of its greater flexibility.

In the larger eastern towns the best class of apartment houses cost from 3s. 6d. to 4s. a cube foot, and the smaller and cheaper apartment houses from 2s. 6d. to 3s. 6d. a cubic foot. Speed of erection is a very important element, bearing on the financing of the venture.

Kitchens are very elaborately fitted, a square area being found most economical, laid out in a hollow square formation, opening into the dining room, and with service entrances at the opposite end. Right-hand service should always be arranged. Gas is found preferable to either oil or coal for cooking, while electricity is considered where there is a power rate of 2 cents a kilowatt. It is interesting to note that in no cases now is ice used for refrigerators, its place being taken either by ammonia or carbonic acid machines, with brine circulating machines.

We think these particulars, which are gathered from a recent number of the "Architectural Forum" of New York, are of interest, as there is little question that the development now taking place in America has its counterpart in changes which are being introduced more tentatively here. In London the process of conversion by which what were once private houses in Bloomsbury and other districts have been utilised though hardly converted as apartment houses is going on apace, while new buildings like the Bonnington and Russell Hotels afford permanent residential accommodation for many. It is natural that the process should be a much slower and more tentative one here, as many try it to escape from temporary service and other difficulties rather than adopt it definitely as a permanent method of living. We are as yet only partially "continentalised" or "cosmopolitanised," and an attempt to follow American precedent by erecting those colossal habitations might well be doubtfully wise finance. But it is within the bounds of possibility that the private town house may become here, as we are told it is becoming in America, a thing of the past.

With such a change would go a great deal of charm and interest, but much of it vanished years ago when the City merchant abandoned London for its outer suburbs.

Our illustrations of Apartment Houses are taken from the "Architectural Forum" of New York.

REIGATE.—It has been decided that the new secondary school for girls shall be erected on the Lodge estate site.

WALLINGTON.—Revised plans have been prepared by the Surrey county architect for the county school for girls, the estimated cost of the scheme now being £36,885.—The County Education Committee have secured a site at Manor Park for a secondary school for boys.

WIMBLEDON.—Sketch plans have been prepared for the completion of the county school for girls. The estimated cost is £15,230.—Plans are also under consideration for a caretaker's cottage.

Our Illustrations.

UNION BUILDINGS, PRETORIA: A COURTYARD ENTRANCE OF THE FLANKING BLOCKS. HERBERT BAKER, A.R.A., Architect.

BISHOPSGATE TELEPHONE EXCHANGE, LONDON. JOHN H. MARKHAM, Architect.

NEW HOUSE AT HOVE, SUSSEX. F. MILTON CASHMORE, Architect.

Notes and Comments.

Sir Aston Webb.

The retirement of Sir Aston Webb from the high office of President of the Royal Academy will be greatly regretted by his colleagues and friends who have considered his honour as one which helped the profession of which he is a distinguished member. It may be many years before an architect again holds the position he is vacating. We had hoped that during his presidency steps would be taken for enlarging the inadequate accommodation given to architecture at Burlington House, but perhaps that may come in the near future. We also regretted that the useful innovation of permitting photographs of buildings to be shown in lieu of drawings of them was cut down and practically eliminated, for it cannot be too strongly insisted on that it is not drawings of buildings but the buildings themselves which should constitute the architects' title to distinction, and if this be granted there can be no adequate reason for eliminating photographs from an exhibition of architecture.

We hope that Sir Aston Webb will long be with us and that we may have the benefit of his wise counsel and wide nterest in all that concerns architects and architecture.

The Leeds and West Yorkshire Architectural Society.

The address of the President of the Leeds Society which has been forwarded to us is one which we should have been glad to give in our columns had space permitted, as it is unusually good. We sometimes find that such documents can be readily compressed, but Mr. Alban Jones' address is so well composed that we feel it would be impossible to do it justice by giving extracts. His allusions to his colleagues in the profession who have joined the majority and those who have earned distinction strike the right note of appreciation without adulation, a work often difficult of achievement. His reference to current politics and Registration were marked with a nice sense of humour, while his summary of the housing question, and his defence of architects connected with it, was masterly.

It is a long address, but one which his audience must have appreciated from start to finish. Good men are needed everywhere, but nowhere more than in the provinces, where the conditions of architectural practice are far from being easy—not that they are easy anywhere, but in very large centres the greater size of much of the work renders specialisation easy, while elsewhere the architect has to be armed *cap à pie* to fit him for the multitudinous tasks he is called on to perform.

The Government Committee of New Methods

There is said to be a distinct cleavage of view among the members of the Government Committee to consider new methods of building. We are not surprised to learn this because it is clear that the operatives' representatives cannot be enthusiastic over the prospect of carrying out work by methods which would certainly eliminate the labour of the organised building industries. But those representatives should consider that they have produced the evils which they fear. There would be little call for alternative methods of building had the trade unions recognised facts and wholeheartedly tried to do their fair share in relieving a shortage; instead of which they have on every occasion endeavoured to secure personal advantage out of the difficulties of others, and if the future housing of the country is carried out for the most part under conditions which eliminate the necessity of employing them they, and they only, will have brought this about. They may in the eleventh hour see wisdom, but we feel little hope that they will.

Humanism, Good Manners and Civic Values.

Under the above heading Mr. Geoffrey Scott writes a criticism of Mr. Trystan Edwards' book on good manners for "Architecture," and we congratulate the Editor of that journal in obtaining a contribution from the most gifted writer we have on architectural matters. He says that Mr. Edwards is too much like Plato and over impressed with "civic values." But he says as there is no danger that his teachings will be pedantically followed, let them be preached. Commenting on Mr. Edwards' criticism of a Chicago design as a habitation for some very tedious and retrograde kind of bee, he goes on to remark "how very much more tedious would these insects become in individual residences, what acres they would occupy in their retrograde way." He says that the city Mr. Edwards would like best is the city with just enough public buildings to go round the central and axial sites and not too many citizens, all of them lodged expressively of their mutual esteem. But as under modern conditions this is a practical impossibility, he is glad when a commercial building of fine proportions is built, though he would prefer a public building expressing the same ambitions. He thinks that Mr. Edwards allows himself to be dominated by buildings instead of enjoying them, and this criticism seems to us pertinent and to the point. He says that the towers of San Gimigniano dwarf the cathedral and were built for the purpose of pouring boiling lead on the citizens beneath, but that in the absence of civic values they give a character to San Gimigniano which we should be sorry to be without.

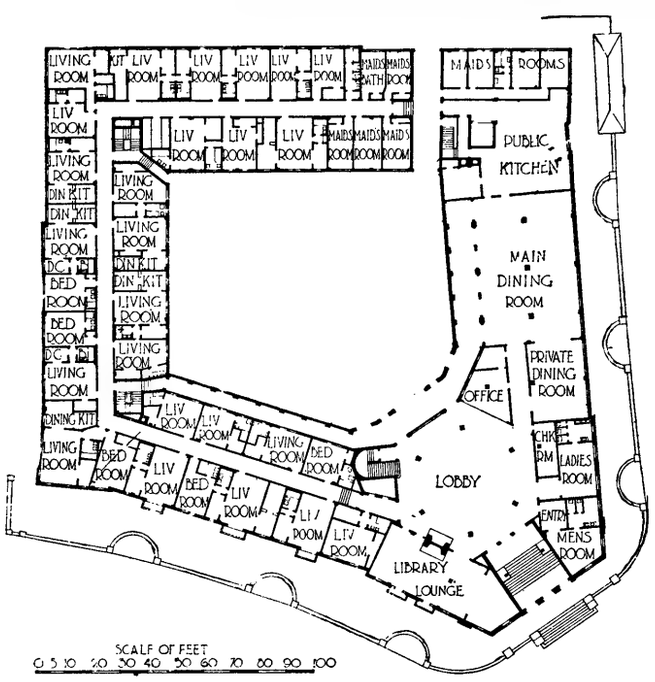
The Prize Giving at Carpenters' Hall.

The annual prize giving to students at the Carpenters Company's Trades Training School took place last Friday at Carpenters' Hall, over 150 prizes and certificates being presented to the successful students by Sir Kynaston Studd, the head of the Regent Street Polytechnic, who gave an admirable address to the students. The Carpenters Company are now associated with nearly all the craft companies connected with building with the exception of the Plumbers Company, who have carried on an independent course to promote the technical efficiency of their craft. We hope that in the future it may be found possible for the Plumbers to join in what is one of the most useful movements connected with technical education which exerts a considerable and increasing effect for good on the building crafts and one which we should be glad to see more fully supported by the various bodies of master builders who are directly benefited by anything which makes for the more perfect training of the craftsman. It is gratifying to note that in this age when Governmental doles are so freely given and grants made are features of our life, that not one penny of public money has been expended on the great work which has for years been carried out at Titchfield Street with increasing success from year to year.

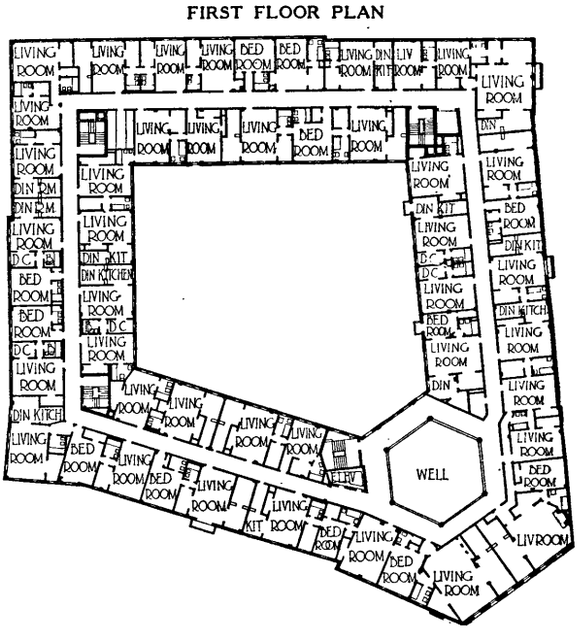
Messrs. Fleetwood, Eversden & King, surveyors, of 3 New Court, Lincoln's Inn, W.C.2, have been appointed Quantity Surveyors for the William Booth Memorial Training College, which is to be erected shortly at Denmark Hill, at an approximate cost of £250,000. The architects are Messrs. Alex. Gordon and G. Morriss Viner, with Sir Giles Gilbert Scott, consulting architect.

Architectural Types.

THE ALCAZAR HOTEL, CLEVELAND. H. T. JEFFERY & SON, Architects.



FIRST FLOOR PLAN



Architects, like men of other callings, may be grouped under many heads, and it may be interesting to consider some of these divisions, impressions from the sum of which form the public's idea of the architect which is in reality a rough generalisation derived from incidental characteristics of men of differing and often opposed types. We have omitted the architectural humbug as he has been dealt with elsewhere, and is but an example of the spurious make-believe, examples of which are to be met with in every calling.

A. The *Public School and University* type.—Architects who have passed through a public school and university start with decided assets and some disadvantages. They have made friends who have similar tastes and pursuits, they are bound together by the freemasonry of memory and, *inter alia*, the fact that they have had such an education usually pre-supposed certain independent means. They are thus a class apart and in taking up any profession they may have the foundation of a clientèle partially formed. On the other hand, earlier experiences often make such men unduly impatient of the drudgery which may fall to an architect's lot in earlier years. Association with those having social advantages may broaden or narrow a man's sympathies, in the latter case standing in his way in the world.

But the architect who has passed through the older universities is usually sure of a certain amount of cultivated support and appreciation as well as finding himself *persona grata* in professional societies. Many men with fairly mediocre abilities have with such advantages met with success they would not otherwise have enjoyed, and properly used, there is no doubt that such a start in the architect's career may be invaluable.

B. The *Architectural School* man.—The product of the architectural schools may be said to represent the *intellectuals* of the architectural profession. They are associated with others who place more value on achievement in design than any other consideration. Their place in the hierarchy is determined not by birth or position, but by ability and industry. At the same time the circumstances of their environment cuts many of them off from the understanding of commercial values, and the all-important study of human nature. If their training results in inculcating a blindness to the world's values, and to the importance of a study of men as well as architecture, it may prepare them for failure rather than success except in the limited and uncertain field of public competition in which human elements are ruled out, but the knowledge and experience gained is of immense value if taken as part and not the whole of a life's equipment, and if it is properly supplemented by practical experience in ordinary office work.

THE HUNTINGDON APARTMENTS, SAN FRANCISCO.

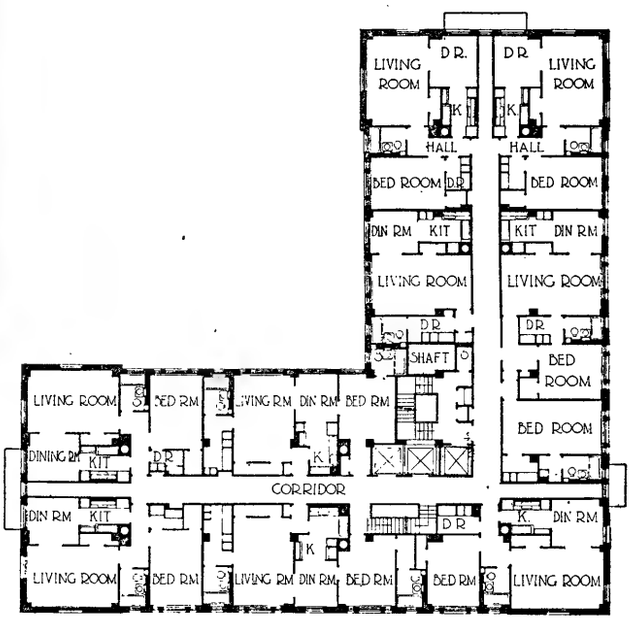
C. *The Competing Architect.*—Competitions are hardly such a prominent feature among us as they were in the closing decades of last century. They moulded a large number of architects, forming their chief education, and they undoubtedly largely contributed to the improvement of standards of planning, while they have also done much to sterotype certain forms of building. They have given us good buildings and bad buildings, and may be said to have acted both as a stimulant and a soporific. The former by leading many to consider the same problem, the latter by inducing a tendency to adopt the same mannerisms and to be sometimes easily contented with machinelike results. The methods of conducting them have been usually more complicated than successful. The architects to whom competitions have become an obsession, may be divided into three groups. The first includes the large number of those who seldom if ever pass through the gates of success. The second, those who from time to time are favoured by fortune, but who can hardly be said to have found it a well renumerated pursuit, and the small number of the fortunate to whom it has brought important commissions and remunerative work.

The successful competing architect tends too often to become a machine, his work appeals to one at first glance, his planning is usually distinctively clever but the nature of the process tends to divorce the successful competitor from the more intimate association of client and architect, which often give charm and interest to architectural work. We may almost say that the competing architect seldom makes his mark as a human factor, but rather becomes part and parcel of a machine grinding out results which often fall short of the interest of works produced under different conditions.

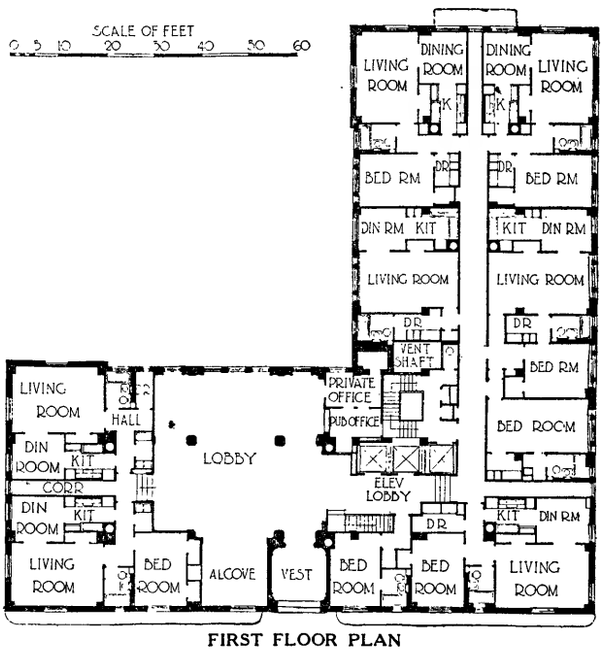
D. *The Artistic Architect.*—The so-called "artistic architect" may be regarded as falling into several groups. He may be one of those to whom the science of building and the practical matters concerning it make little appeal, and are as far as possible relegated to others, or he may be the self conscious *poseur* who, like some of his colleagues in painting and sculpture, tries to attract attention to himself by his eccentricity. He may on the other hand be the product of the arts and crafts movement, an exponent of "the simple life," or an expounder of a new social order. We quote his title as it is superfluous to say that an architect worthy of the name should have artistic capacity, or should need any designation other than that of "architect."

The "artistic architect" as he is commonly spoken of, is usually a *poseur*, sometimes a fraud, and generally one whose capacity is limited and one-sided. He is seldom a man best fitted to safeguard a client's interests, for few who build are in a position to be able to sacrifice practical considerations for aesthetic ones, while the test of a good architect is that he should be able to satisfy practical requirements in a seemly and fitting manner. The "artistic architect" is a product of large cities, the hero of drawing rooms, and affords a good character study for the novelist, but he will seldom cut much of a figure in the serious affairs of life, and his fame is likely to be ephemeral.

E. *The Commercial Architect.*—The commercial architect is one to whom financial considerations have a natural appeal. He realises that the great majority of buildings are erected, not in the interests of art or



TYPICAL FLOOR PLAN



FIRST FLOOR PLAN

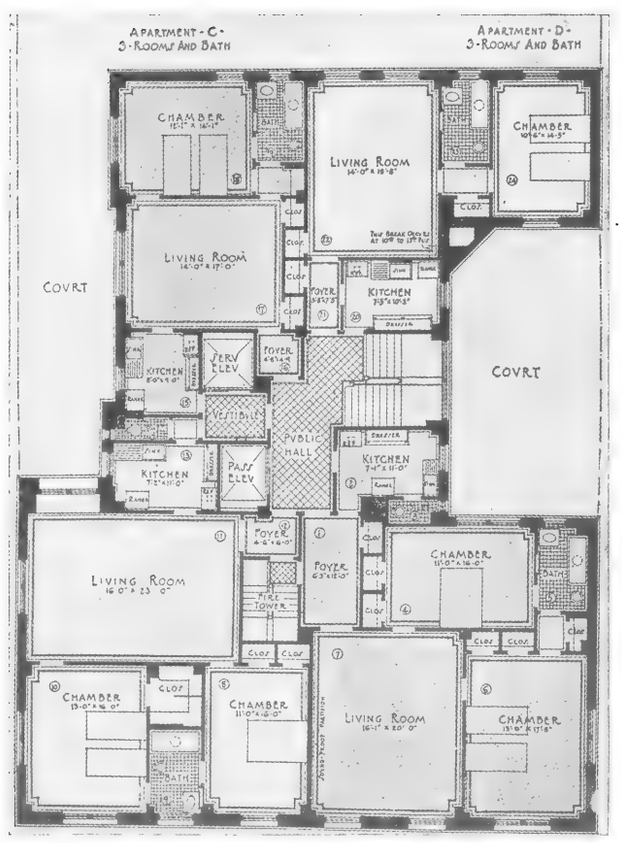
caprice, but to earn a dividend on capital invested. He knows that he can create work for himself by showing others they can make money by building, and his work largely consists in accurately determining the best use to make of a site, coupled with the ability to persuade those having financial means to adopt his views. He is largely independent of the vicissitudes which make the practice of architecture a precarious pursuit to many, and his success does not necessitate the satisfaction of fastidious standards of taste. The commercial architect is often

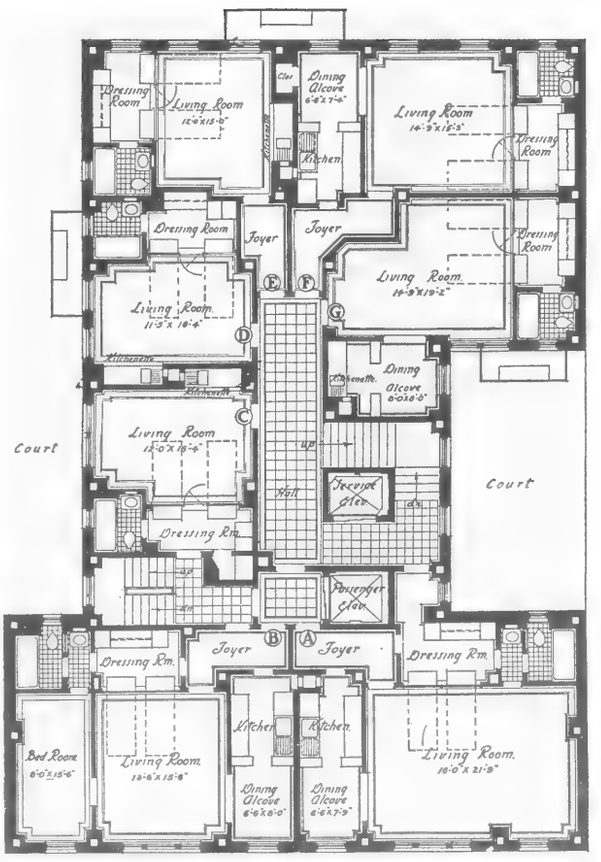
decried and criticised by architects who adopt other methods, but the fault rather lies with the failure of the majority of architects to recognise the obvious. They should reinforce the ranks of the commercial architects by the addition of men of greater architectural powers, for it is the commercial architect who alone is destined to command the market of building. He only can be said to be in truth independent and master of circumstances, while others are dependent on them and unable in a large measure to control them.

The architect who possesses capital and has a secure private income from investments would always seek to increase his returns by advantageous investments, and he cannot be surprised if the public do likewise with little regard to æsthetic values, but there is no reason to think that the best architectural skill would not be readily utilised by financiers providing that they found what is the pre-eminent considerations of finance have been understood and acted on. Success is less often a matter of chance than we are disposed to believe it and is much more dependent on making the right moves at the right time.

F. *The Provincial Architect.*—When we think of the provincial architect we do not picture him as a citizen of one of our greater cities which are year by year approximately nearer to London in the scope offered to architects and the conditions of practice in their midst, but rather of the architect of a small town or semi-rural district. The architect in such a locality finds an immense mass of varied duties which men in larger centres leave to specialists. He is called on to survey and value land, to carry out smaller building work, to take out his own quantities where they are required, to superintend his buildings, which are often spread over a wide area, with little assistance or help. The employment of a clerk of works on most of the buildings falling to him is impossible. Above all, he like the country lawyer and country doctor, knows all his clients personally and many of these being people of small incomes look on the employment of an architect as an unusual luxury and are by no means easy to satisfy as to a scale of fees. He may, like his colleagues in other professions in the country, be said to bear the heat and burden of the day and is performing a most useful work in "educating the public," the first steps of which education are difficult and arduous ones. It is not to be wondered at, judged by exalted æsthetic ideals, that much of his work performed under such auspices should be open to some criticism. He covers too wide a range of occupation to make it easy for him to excel in design, and the conditions under which he works renders it immensely difficult to him to impose his views on his clients who often think slowly and have strong and hide-bound prejudices, while they have an intense wish to get their money's worth. For all these reasons success when gained is a greater tribute to his powers than success gained by others under easier conditions. The all-round competence of many architects in provincial centres is often astounding, and it is not to be wondered at if they feel that those who are placed in easier positions undervalue their difficulties and belittle their achievements. They may be said to hold the weakest part of a difficult position and their success in doing it greatly strengthens the profession in whose cause they are enlisted.

G. *The Architect as the Public Sees Him.*—We have tried to briefly summarise a few of the many differing types of architects as we know them; it remains to consider the compound impression formed by the public. One man's experience is unlike another, yet certain general impressions remain. The architect's greatest difficulty arises from the fact that his operations primarily involve the expenditure of others' money, and it is often natural after the event to wish that part at least of the sums expended had been saved. The commercial architect in this has the advantage that if his scheme has been a wise one it may result in a profitable return on the amount





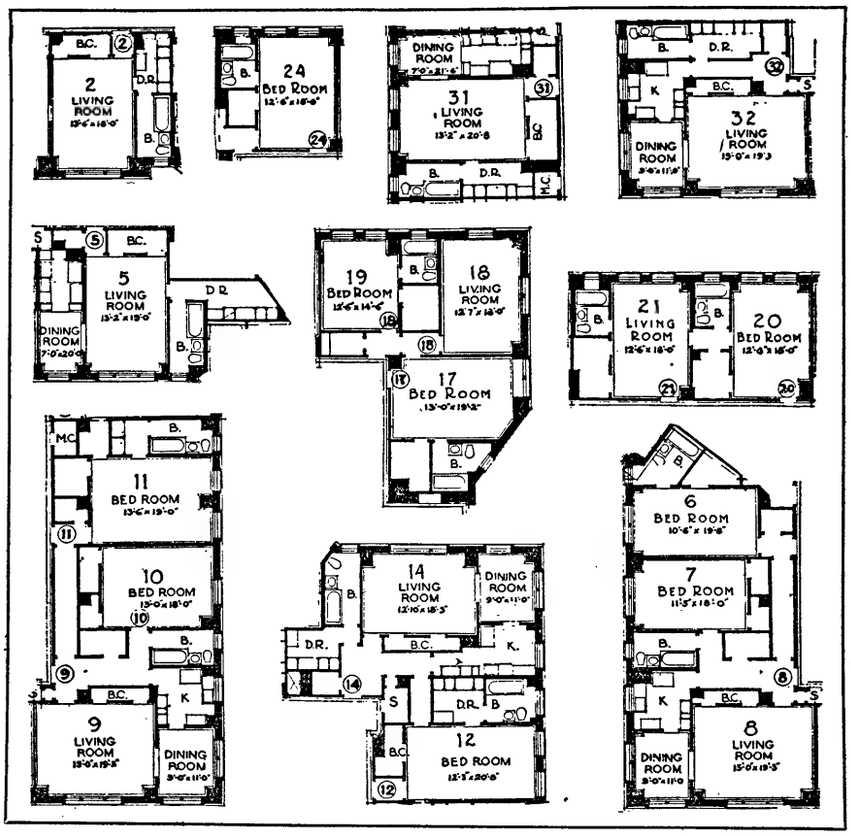
COMPARISON OF "REGULAR" AND "EFFICIENCY" PLANNING.

PLAN A.

This plan represents a first step in efficiency planning as developed a few years ago. The effort then in space-saving was confined principally to the elimination of dining rooms and the arrangement of the apartments in compact grouping of rooms. On each floor there are four apartments, providing a total rental of $8,000 per year, as described in the accompanying article.

PLAN B.

A modern efficiency plan developed upon a lot of approximately the same size. This plan provides on each floor seven apartments at a total rental of $12,400 per year, and with only a comparatively small increase in the cost of the building. Here the "double-utility" space idea is carried out fully or partially in each apartment by means of door beds and other equipment.



A STUDY OF TYPICAL APARTMENT PLANS FOR AN APARTMENT HOTEL. THESE ARE PLANS OF THE NEW WINDERMERE, EAST CHICAGO. NOTE COMBINATION OF "REGULAR" AND "EFFICIENCY" PLANNING. G. W. & GEORGE RAPP, Architects.

expended, and is for that reason on a par with any successful business operation.

But though the building of a house may in many cases be a necessity, there is always the possible thought that it might have been less expensive or as compared with another of less capital value. Then the architect may or may not meet with success in meeting his clients' wishes, for it is by no means always possible to absolutely understand a client. The danger which an architect runs is therefore that of having been the instrument through whom a client has spent more than he considers wise, or of having given him what subsequent realisation would wish had been different. More than this the quality of the work done depends largely on circumstances which the architect cannot wholly control, but this difficulty is not realised sufficiently by the majority of men.

An understanding of the foregoing facts will account for a certain absence of entire trust in the relations of architect and client.

And as unfortunately inefficient men are met with in every calling and a man's acquaintance is certain to have brought to his knowledge instances of the results of such inefficiency it is natural that the popular impression of an architect should be coloured by hearsay, rumour or knowledge.

An architect's work stands four square to the winds, the conditions under which it was produced are frequently either unknown or forgotten.

This applies to both public and private buildings, but in the case of the former the architect is frequently more leniently judged because a loss shared by a community does not inflict direct loss on any individual and because the public has not often sufficient knowledge or insight to visualise what it might have had. But as a rule the public may be said to judge too leniently of shortcomings in design and too hardly on questions of workmanship and of cost as to which the architect's responsibility is distinctly limited. And too much stress cannot be laid on the very great importance of avoiding "extras" which have frequently been the cause of a destruction of confidence, sometimes illogical and unreasonable, but which the wise man should always anticipate as a probability.

We should define the public wish in dealing with architects as a wish to be safe and not to be unduly troubled in the conduct of building, and if it were generally assured on these points the "education of the public" would be in process of realisation.

Mr. Penty on American Architecture.

Mr. Penty's visit to America has left him with most favourable impressions of the architectural advance made there. He finds the American attitude towards the Renaissance the very antithesis of that prevailing here. There he feels himself perfectly at home, but here he is suffocated. He says that in both countries opinion agrees that the pedant is the enemy of architecture and in both opinion is expressed in favour of encouraging experiment and discovery. But coming down to facts he inclines to the view that the Renaissance with us became narrower and narrower and more and more pedantic as it proceeded, while in America it has a consolidating and liberating influence, the last word of which is not pedantry and neo-grec, but a return to the romanticism of the earlier Italian Renaissance, Romanesque and Italian gothic. There is a good deal in what Mr. Penty says, though we should have said that the neo-grec movement here had not been at its height very pronounced and was now a declining influence except perhaps in the immediate circle of the Liverpool Architectural School, where its influence is still marked. We have also to allow for the fact that the opportunities open to architects here do not afford the stimulus of those which are to be met with in modern American practice. It is possible even there that architectural development à la Brobdignag will come to an end, for the ability of architects to furnish designs for an immense population must in the end outstrip the needs of that population itself when an approximation will be made to conditions existing in older countries.

GLOSSOP.—The Town Council are to borrow £3,420 in respect of new municipal offices.

NEW MALDEN.—The Maldens & Coombe U.D.C. have passed the following plans: four houses, Blakes Lane, for Modern Homes & Estates.

Architecture and Music.

By E. Leslie Gunston, A.R.I.B.A.

The saying of Ruskin, " Architecture is Frozen Music," is very well known, but like most sayings, while holding the germ of a great truth, must not be taken to be a very exact statement of facts.

While many of the buildings of the present day are frozen something, certainly not music, much fine architecture has the essential qualities of great music, and perhaps a few reflections on the affinity of these two great arts may lead to more interest in a most fascinating subject.

A man need be no musician in the technical sense of the word to be able to appreciate good music. He can be stirred to the depths of his being by a wonderful symphony by Beethoven, or Tchaikovsky, or by one of Wagner's operas even though he cannot follow the score properly. And if he be an architect and has a passion for music, then indeed is he favoured of the gods, for to him there is revealed not only a symphonies of sound, but also symphonies of stone.

An architect having these musical tendencies and some imagination (and what architect worthy of the name has not imagination ?) cannot fail to see in a fine building musical chords and cadences, rhythm and beauty, translated into architectural features as if indeed chords had been petrified into clustered columns or airy arcades.

Not all music is " architectural," but some of the great masters of the past unmistakably gave their works this quality. That giant of composers—a veritable Michel-angelo of music—J. S. Bach, is a wonderful example of this architectural genius in the sister art.

To hear one of his organ Preludes and Fugues recalls at once to the architect visions of architectural design. These pieces of music, magnificent in proportion, fine in detail, composed of many different parts, yet still one in the superb unity observed throughout, are like great cathedrals, every detail combining to produce the whole, yet each subservient to the main lines and proportions of the entire buildings. The way Bach groups his various parts to produce the climax and complete work is very like an architect designing a big building; a sure foundation being at first the chief concern, the well-proportioned bones of the thing springing from this; then he places part by part with unerring sense of fitness and proportion until the whole is complete.

So also the composer weaves his melodies and builds up his work on a sure foundation of fine proportion, and adding part to part achieves a monument of skill that leaves the listener full of wonder at this edifice of sound.

Richard Wagner brought much that was new to music and one has only to listen to the music of the Overture to " The Mastersingers " to understand how architectural great music can be. Theme after theme is brought in, slightly altered, interwoven one with another with amazing richness of effect, until the work is like a great architectural composition, the style preserved throughout, but different in detail and in the method of treatment, one part similar to another yet the whole piece complete in itself. Here is contrapuntal skill at its height, and here the architect can learn from a master of another art that difficult lesson of keeping the character of a building the same in its various parts. So many buildings are ruined through their character changing several times that to be able to do as these composers in this respect is well worth taking the trouble to emulate.

In orchestral and such like music the composer has orchestration to obtain his desired effects, as the architect uses the different materials at his disposal in his building. An architect by using the right materials in the right place can, like a composer who is brilliant at orchestration, achieve almost any effect he desires of elegance or immense strength, whether it be by means of beautiful bricks or granite in the one case, or by the strings and wind or brass in the other.

One of the chief glories of Wagner's genius was his unfailing sense of what was the right orchestration to obtain the effect he desired, and no better example of this wonderful sense could be mentioned than his marvellous opera, " Tristan and Isolde." Here the very instruments almost speak what was in the composer's mind, regardless of the human voice, and in the same way an architect's materials should leave no doubt on the mind of the beholder of his building what effect he intended to convey in his design.

While it is impossible go through the entire range of music and architecture looking for similarities without a very great stretch of the imagination, some styles of architecture seem to suggest certain types of music.

The architectural designs of the Brothers Adam may be to some reminiscent of the delicate music of the eighteenth century—the music of Mozart or Haydn, a minuet or divertimento; graceful and in perfect taste. And cannot one, when face to face with some rich example of mediæval Spain or old Mexico, or even before some much abused Rococo work, feel that these designs have their counterpart in some music of modern times ?

A riotous façade of some church of old Spain, with its wealth of detail, suggests perhaps a work by Scriabin—may be " La Poème de l'Extase " or Stravinsky's daring harmonies. The same unfamiliar treatment, the licence taken with existing forms, the " harmonious discords," no apparent order in anything is seen, yet who can deny the startlingly fresh effect of such music, or of such a riot of detail as is to be seen in this style of architecture ?

In suggesting the similarities between certain styles of architecture and certain types of music it must not be thought that every building is either a symphony, a mazurka or a nocturne. It might not be very difficult however to some, to name a building that seems to suggest each of the three musical forms enumerated here at hazard.

Also it would appear that some of the buildings of the present day have been designed by architects with strains of some jazz-band syncopating in their ears. These buildings have not the scholarly grace of most of the work in the Renaissance period, neither have they the florid abandon of much of the old Mexican or Spanish work. They are merely dull and uninteresting, devoid of any real beauty, like many an old Italian Opera compared with such an opera as " The Mastersingers." They have many little isolated tunes in the form of irrelevant ornament scattered about, but what they lack is the guiding hand that can use the simplest materials to give the greatest effect and group each separate part of the design into a thing of beauty.

Some of the most moving of all musical passages are those in which but very few notes are used and yet exquisite melodies can be made from such simple material. No one who has heard the tone-poem " Finlandia " by Sibelius can forget the beautiful simplicity of the middle section, the folk-song melody, or the Prelude to Act III of " Tristan and Isolde." The shepherd's pipe tune in this piece is the very incarnation of suffering and pain; and yet how beautifully sad. Or again at the beginning of the love-duet in the same opera, two or three notes only are used but they are so arranged by a master hand that they become fraught with great beauty. The orchestration is right, the time set is right and the key is right.

So in architecture the simplest materials and treatment can by the great become of wonderful significance. The perfect proportions, fine plain surfaces contrasting with deftly placed centres of ornament; no violent changes of character; everything ordered and leading to one conclusion, the production of a design of refinement and beauty—how closely allied is all this to a grand musical composition in which the character of the piece is preserved throughout; the solo work like fine ornamentation against a plain unobtrusive sound background of many instruments; the careful proportions of one part to another and the inevitable massing up of all the parts to form the complete architectural structure of beautiful notes.

MILFORD.—The Ministry of Health have approved of block plans for the proposed sanatorium to be erected by the Surrey County Council.

Plywood.

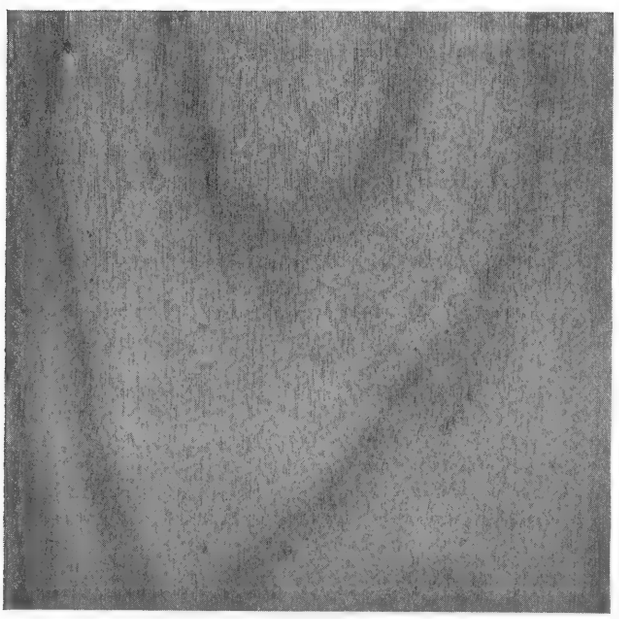
The New Material for Interior Decoration.

By A. Mora.

The application of decorative materials is largely dependent on their being suitably advertised, and it must be confessed that plywood has, so far, received very little attention in the Press.

It is probably due to this that the public and even the building experts are on the whole extraordinarily badly informed on the properties and adaptabilities of plywood as a material most exceptionally well suited for internal decoration purposes.

One of the principal worries of the builder and architect is to find a way to harmonise effect and cost. The average man who orders a house to-day is very keen on an artistic decoration of the interior, and only too often finds that the realisation of his desires is completely squashed by the extraordinarily high cost of materials and labour. The



No. 1. ROTARY CUT GABOON MAHOGANY PLYWOOD OF A PINK TEXTURE.

fact that wall boards have found such wide application (after a suitable advertising campaign on the part of its selling organisations) may just serve as a proof that a material of this kind was really badly needed. Seeing, however, that similar propaganda work has not been done as far as plywood is concerned, it is not surprising that so very little is known, because it, in many respects, serves all those purposes for which wall board is not suitable to be used on account of its nature and also its comparatively high cost.

In order to appreciate the pleasing decorative effect obtainable, it may be of interest to review shortly the process of manufacture, which very clearly exposes the characteristics of the decorative effect which the plywood board produces. Plywood consists of three or a larger number of sheets of veneer, which have been either sliced or rotary cut from a log of wood, the veneer being in each instance of a thickness of 1 to 3 mm. These three sheets of veneer are subsequently glued together to a board of up to 7 or 8 feet in length (with the grain), and, say, 48 inches in width (across the grain), and the process of gluing the veneers together is so arranged that the middle veneer is placed at right angles to the outside veneers, as far as the grain of the wood is concerned. This is done in order to increase the strength of the board, and, as a matter of fact, a plywood board of, say, 5 mm. (3/16 in.) thickness is as strong, if not stronger, than a $\frac{1}{2}$-in. solid timber board.

The peculiar construction definitely guarantees the board from shrinking, warping, cracking; hence the plywood board can justly be described as ideal timber, as it is not liable to the usually uncontrollable tendencies of timber to expand and shrink.

If the veneer is sliced from the log, the decorative effect obtained is similar to that of an ordinary sawn board, while the rotary cut veneer produces a peculiar effect, which is, perhaps, novel to the eye of the uninitiated. In order to illustrate the decorative effect of the different ways of cutting plywood, four illustrations are given, two of which represent rotary cut veneers, and the two others sliced veneers.

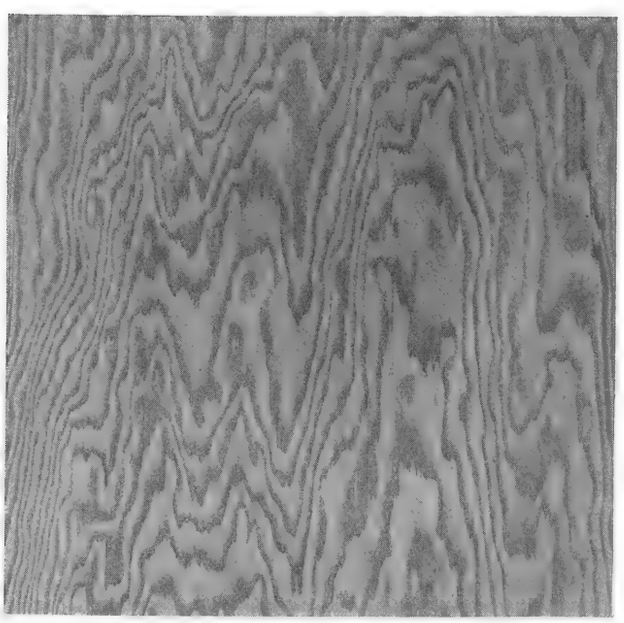
The grained panels, as shown in the photographs, have a very pleasing appearance, and if the effect may seem to be somewhat glaring and bizarre, it may be added that such glaring panels were chosen on purpose, so as to illustrate more vividly the wonderful effects of light and shade produced by the grain of the wood. It is to be regretted that the photographs do not allow for the natural colouring of the wood, which increases considerably the pleasant effect of the grain.

Photograph 1 shows rotary cut gaboon mahogany plywood of a pink texture; photograph 2 shows Oregon pine plywood of a deep orange colour (rotary cut); photograph 3 shows African mahogany in a beautiful deep red (sliced); and photograph 4, elm plywood, the colouring of which runs from a deep brown to a light yellow, and shades off into a light grey (sliced).

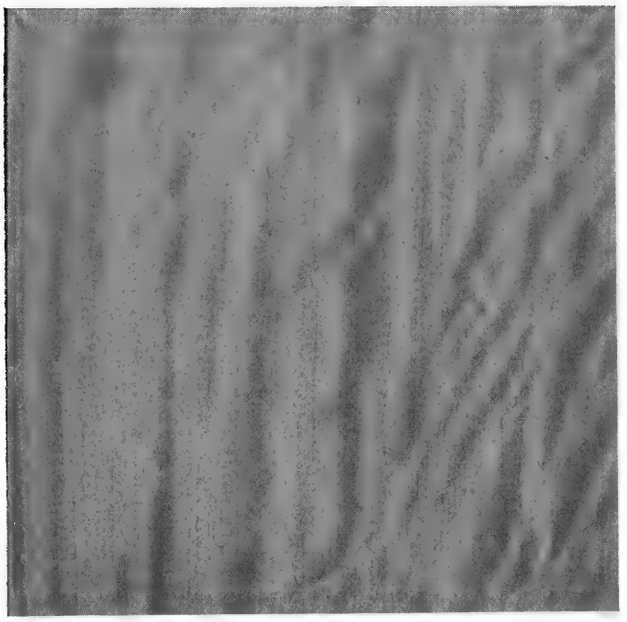
Perusal of the photographs will immediately suggest that each different grain of wood could serve a particular purpose; the more vivid grains would be more suitable for halls, cinemas, etc., while the calmer grains would well fit a panelling of a dining room, nursery, etc.

There is, of course, no other material which can, at the price, produce a similar effect as plywood. This material enables everybody to adopt this most artistic kind of wall covering. The present enthusiasm for Jacobean furniture suggests immediately a wide application of oak plywood for the panelling of dining rooms, while sliced mahogany in narrow panels, reaching, say, 4 feet high, on the walls of a sitting room, suggests a feeling of comfort and luxury which only very expensive wall papers can produce.

Plywood is a material which can produce the effect of luxury and richness at a cost which is incomparably lower



No. 2. ROTARY CUT OREGON PINE PLYWOOD OF A DEEP ORANGE COLOUR.



No. 3. SLICED AFRICAN MAHOGANY, DEEP RED IN COLOUR.

than wall paper or solid timber panelling. The advantages of utilising plywood for panelling purposes can be more vividly explained if one realises that it does away with all plastering of the walls, and all that is required for plywood panelling is a skeleton of battens fixed to the brick wall on which the different panels are fastened. In most instances the various panels can be now obtained cut to the exact size required, and it may be therefore easily imagined that the putting up of plywood panels can be achieved at half the cost, and half the amount of labour. On top of all these advantages, plywood is a very hygienic material, and can hardly be injured by atmospheric influences.

There is a certain amount of prejudice against plywood, this being principally founded on the fact that it is a novelty, also there is the widespread idea that it may warp, that the plies may come apart; it is to be admitted that not any kind of plywood should be used, but certain guarantees should be demanded from the manufacturers that the glue used by them is waterproof, and has such adhesive qualities as to insure against defects appearing in the boards, such as blisters, etc. However, in the course of many years in the application of plywood, it has been seldom found that the material has given any reason for complaint, and short of the fact that, but for polishing, it seldom requires repairs.

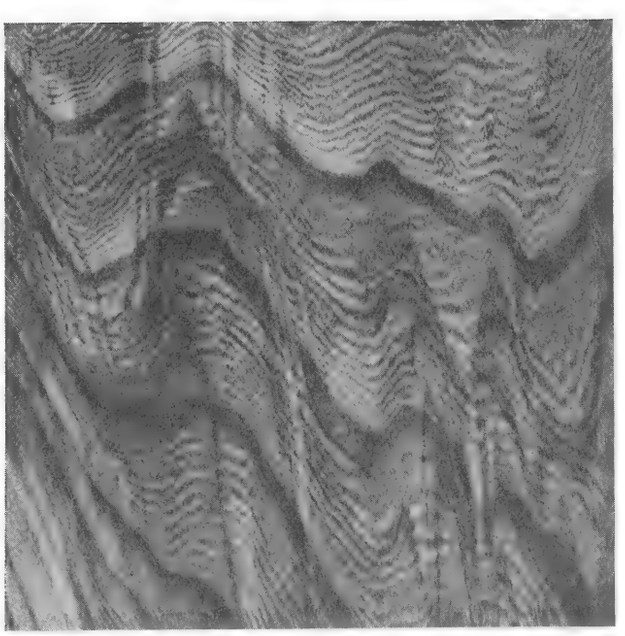
Besides the suitability of plywood for the artistic decoration of rooms, it is, of course, an ideal material for the erection of panels and partitions in offices, showrooms, hospitals, etc. There, of course, a cheaper class of plywood can be employed, and rotary cut oak plywood, or ash, may be found very suitable.

A very wide field exists to-day for its use as a partitioning material in factories and warehouses. The modern design of factories is based on the principle of sub-dividing the interior, in accordance with the designs and requirements of the owners; and to a large extent these partitioned walls are being put up by means of artificial stones, etc. The writer has had an opportunity of viewing quite recently a modern factory, where all the partitioning was done of plywood at an extraordinarily cheap cost, the material used being third quality birch, in the size of about 36 in. square. The effect of those brightly varnished birch walls, which were easily cleaned and therefore as hygienic as could be desired, was uncommonly pleasing, in contrast to the usual aspect of plastered factory walls, chipped, broken and covered with dust.

There is no doubt whatever that the application of plywood for purposes as outlined above is growing steadily from year to year. This may be gauged from the fact that the number of new factories erected in the course of the last ten years has increased almost tenfold, and the imports into this country are doubling each year.

However, while high class plywood, manufactured of expensive woods, is being increasingly utilised in the United States and also on the Continent, in this country the increasing demand for this material has, so far, confined itself to birch and alder, and altogether to the cheaper class material. It is the opinion of the writer that the lack of propaganda is largely responsible for this state of affairs, and that so-called artistic plywood should receive more serious attention, both by architects and builders, in this country. The example set by the United States, where even floors are being laid with plywood, should encourage enterprising architects and builders to take up more seriously this wonderful material, which, no doubt, opens up quite a new field of internal decoration, and affords a richness of effect at a cheap cost.

The illustrations are reproduced by kind permission of the Plywood Importation Co.



No. 4. ELM PLYWOOD, THE COLOURING OF WHICH RUNS FROM A DEEP BROWN TO A LIGHT YELLOW AND SHADES OFF INTO A LIGHT GREY.

Mayfair Residential Flats.

A large block of flats is in course of erection at No. 12 Charles Street, the former town house of Lord Savile.

The site extends from Charles Street to a private road in the rear, and the building will consist of 7 storeys, containing two large suites on each floor with lounge hall, two reception rooms, and from three to six bedrooms, in addition to ample kitchen offices, grouped round a central courtyard.

The construction will be fire-resisting throughout, and the Georgian elevation will be in Crowboro bricks with stucco cornices and enrichments in keeping with the general architectural character of the street.

The building is being erected for the London and Northern Estates Co., Ltd., from designs by Mr. Paul Hoffmann, architect, Capel House, E.C.2.

The general contractors are Messrs. W. H. Lorden & Son, Ltd., of Upper Tooting; the steel engineers, Messrs. Young & Co., lifts by the Express Lift Co.; heating and hot water installation by Messrs. Russell.

For the construction of a demonstration plant for the Septic Gas Co., of Australia, Ltd., at the Long Ashton Sewage Disposal Works, under the direction of Major T. J. Moss-Flower, chartered civil engineer, 28 Victoria Street, Westminster, S.W., Wm. Cowlin & Sons, Bristol, accepted.

OTLEY.—The Urban District Council have decided to erect another 50 houses on the Carr Green estate.—Plans passed: boiler house, Atlas Works, for Messrs. Dawson Payne and Elliott, Ltd.; layout of new building estate, Leeds Road, for Mr. F. W. Robinson.

Architects' Legal Dispute.

Mr. Justice Roche, in the King's Bench Division, on December 3, had before him a case arising out of an arbitration award in a dispute between two architects, Mr. Thomas Peter Clarkson and Mr. Herbert Austen Hall.

Mr. Barton, for Mr. Hall, said the dispute was a professional one. The parties were employed with another gentleman who was a brother of Mr. Clarkson, by Messrs. Peter Robinson & Co., who were contemplating a large new building scheme for their premises in Oxford Street, London. The scheme for that case could be divided into two parts, the eastern and western blocks. As to the eastern block there was an agreement of November 4, 1914, which provided for the employment by Messrs. Robinson of the three gentlemen as architects. It was contemplated at the time, he thought, that they should be architects for more than that block of buildings, and following the agreement of November 4, the architects entered into an agreement on November 5. The dispute in that case was that the work on the eastern block was ceased in 1916, and the company then paid certain sums to the architects. In the meantime the architects had acted in connection with the western block. Mr. Clarkson was a director of Messrs. Robinsons. Later on it was decided to go on with the eastern block, and Mr. Hall discovered that although there was an agreement which specially provided that the architects should work together in connection with any future business obtained for them from Messrs. Robinson, Mr. Clarkson had been appointed sole architect for the eastern block, which was work in which the architects earlier acted. His (Mr. Barton's) case was that the partnership agreement between the architects still subsisted, and that the work for the eastern block should have been obtained for the partnership. Upon that there was arbitration before the President of the Institute of Architects, and an objection was taken for Mr. Clarkson that the architects' agreement being merely supplemental to the first building agreement of November 4, 1914, had come to an end, and that, therefore, there could be no submission to arbitration. The arbitrator decided to hear the evidence without prejudice on the rest of the case without going into the preliminary point; and he made an award the effect of which was, that if his Lordship was of the opinion that there was a subsisting submission to arbitration, his client was to recover one hundred guineas, and costs of the reference and the award. He was supporting that award. The material agreements was the architects' agreement of November 5, 1914. It was supplemental to the agreement referred to as the principal agreement, dated November 4, made between Messrs. Robinson and the architects; and it was also prospective as regarded other work which might be received from Messrs. Robinson.

Some work was done in connection with the eastern block but owing to increased costs the scheme was stopped. Messrs. Robinson decided to pay 2½ per cent. on the estimated cost of £60,900, to the architects, on the understanding that the agreement continued. They also had in consideration an agreement for the western block. To the company's letter in these matters, the parties in that case replied that in their opinion the agreement regarding the eastern block was at an end, but that if the company decided to proceed they would be pleased to continue to act. The work on the eastern block remained in abeyance, but the western block negotiations continued, and an agreement was executed in May, 1916. The architects entered upon a supplemental agreement, and it expressed the existence and continuance of the November, 1914, agreement. The architects worked on the western block. When it was decided to proceed with the eastern block the directors of Messrs. Robinson resolved it was not necessary to employ an outside architect, and that the work would be more economically and efficiently dealt with in the company's own offices.

Mr. Clarkson was appointed architect, and Mr. Hall complained. The matter went to arbitration on Mr. Hall's claim. He alleged that (1) the partnership agreement of November 5, 1914, still subsisted; (2) that the conduct of Mr. Clarkson in agreeing with Messrs. Peter Robinson, Ltd., to be sole architect for the completion of the eastern block was a breach of his duty to his partners under the partnership agreement of November 5, 1924, and that the alleged breach had prevented the partnership from earning certain fees, and that Mr. Clarkson was liable for such loss. Before the arbitrator Mr. Clarkson took the objection that the agreement of November 4, 1914, had been determined, the original service of the architects thereunder having been paid for the subsequent services dispensed with and that that agreement being terminated, the agreement of November 5, 1914, was of necessity also terminated. The arbitrator heard the evidence and decided as stated.

Mr. Barton went on to argue in support of the contention that the agreement in question never came to an end.

Mr. Barrington Ward, for Mr. Clarkson, contended that the agreement had ended, and that the arrangement for the western block was entirely separate.

Mr. Justice Roche, in a long judgment, dealt fully with the facts and arguments. He said the real question put to him was whether there was a subsisting arbitration under which the arbitrator had power to make the award on the claims put forward by Mr. Hall. Mr. Hall said the partnership agreement of November 5 still existed. It was not really a partnership agreement, but an agreement providing for joint action as architects in certain specified matters. Mr. Hall also alleged Mr. Clarkson's conduct was a breach of the partnership agreement. In his (Lordship's) opinion the complaint against Mr. Clarkson was not well founded. The agreement of November 5 was supplemental to that of November 4, which related to the employment of the three architects by Messrs. Robinson for the eastern block. The agreement of November 5 provided for the distribution of duties and rights and benefits among the architects under the principal scheme. It also contemplated that there might be other matters in respect of which Messrs. Robinson might choose to employ them, and if so employed on other matters the architects could act upon the terms of the November 5 agreement. In regard to the eastern block, nothing had been done by 1916 except tenders had been invited, but no contracts entered. The matter was then not taken up again until July, 1923, and Mr. Clarkson alone was employed as architect. The arbitrator had found Mr. Clarkson was wrong in the matter.

After consideration of all the facts and arguments, his Lordship said there was no contract on the part of Mr. Clarkson which was broken and a breach which could give rise to Mr. Hall's claim for damages. He (his Lordship) had no doubt that the agreement of November 4 had been put an end to, tenders for the building apparently having been declined by Messrs. Robinson. In these circumstances it could not be argued successfully that the agreement of November 5 gave any right in connection with the eastern block to either of the parties, and there was no obligation on Mr. Clarkson to do anything, as Mr. Hall suggested.

The material clause of the agreement of November 5 only operated so long as the agreement of November 4 existed. There was no general agreement between Mr. Hall and Mr. Clarkson that either of them should devote their best or any effort to get other joint work for the partnership. Whether that joint work was entrusted to them or not was left to the unfettered control and decision of Messrs. Robinson. So far from it being the right and duty of Mr. Clarkson to invite the giving of work to Mr. Hall and himself, having regard to the relations of Mr. Clarkson to the company, there was a good deal for the contention that his duty was the other way. There was no obligation on Mr. Clarkson with regard to the eastern block when the agreement of November 4 was terminated, to do anything to secure or attempt to secure for Mr. Hall and himself a further agreement. Accordingly he (his Lordship) answered the question submitted to him in the negative, and he decided that the arbitrater had no power to make the award which he had done that Mr. Clarkson had committed a breach of agreement as alleged. That disposed of the matter.

Paris Housing Programme.

The Municipal Council of Paris has voted 125 million francs and the General Council of the Departement of the Seine 100 millions for the construction of cheap dwellings. The Paris programme comprises the creation of 14,130 houses for large families, in addition to 13,861 already provided by the City Council, the Seine Departement and certain communes.

Noteworthy as this effort is, it falls far short of the 61,551 dwellings which have been estimated as required for the metropolis and the suburban communes. To shelter the Parisian population, indeed, with *approximate* sufficiency and salubrity it would be necessary to build *at once* 3,000 dwellings of 5 rooms at least, 10,000 of 4, 15,000 of 3, and 8,000 of 2. These minimum figures are barely acceptable hygienically, being on a basis on only one room for two persons.

A few figures will give an idea of the decline in construction since 1913. In that year 2,413 "flat" buildings had been erected; in 1919, 411 (against which 126 demolitions must be set off). In the suburbs, 5,000 houses per year were built before the war; for 1918 and 1919, 1,606 and 950 respectively were constructed, while 836 were knocked down. Since then the state of affairs has not improved.

Ten per cent. interest will have to be paid for the 125 million loan.

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R.A. 1924.

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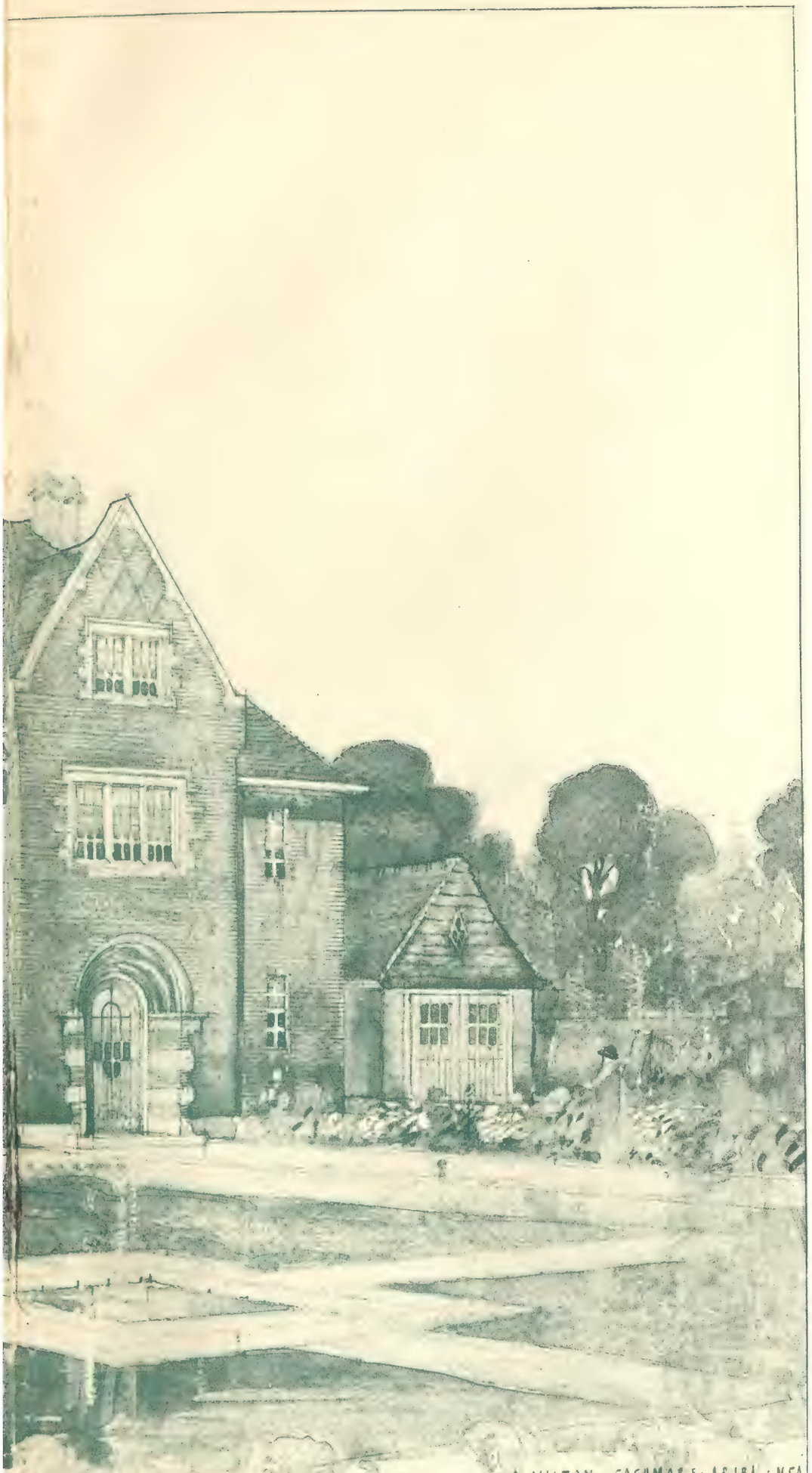

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A.R.I.B.A., ARCHITECT.

Homeless Art.

The Shortage of Exhibition Galleries—and Some Suggestions.

By Alfred C. Amoore.

The officials of the various art societies in London are gravely concerned over the scarcity of accommodation for the holding of their exhibitions. The lack of galleries has been felt for some time, and it is becoming more serious, for the accommodation is far less now than it was a few years ago. It is some time since the New Gallery was converted into a cinema house, but only comparatively lately the Grafton Galleries have ceased to be available for picture shows. No new large galleries have been opened to take the place of those lost, and the various societies find it very hard to secure accommodation. The situation may be greatly relieved, however, when the old County Hall in Spring Gardens, Westminster, has been converted into a picture gallery, a work which will soon be completed, though one cannot say what accommodation it will afford.

Of course, there are plenty of small galleries in different parts of the West End, and especially in the locality of Bond Street, but these are far too limited in area for exhibitions at which it is desired to hang some 500 or 600 works of art. The situation would be much more serious were it not for the fact that the Royal Academicians have come to the rescue, and have allowed their splendid galleries to be used in this way. It was said the Arts and Crafts Society were in such a quandary not long since for want of a gallery that it had almost been decided to abandon the show when the Academicians granted their rooms for the purpose. The action of the R.A. has removed the reproach to which they were subject a few years ago that they did not make anything like full use of their rooms, which were empty a great part of the year, and the extent of the accommodation the R.A. can afford is shown by the fact that rather more than a year ago two fairly large exhibitions were open simultaneously in their rooms. But even so, more galleries are needed.

The difficulty is particularly felt by organisers of shows in which crafts form a part, and crafts are becoming an increasingly important feature of art displays, because so many people who do not want pictures will, and do, purchase jewellery, enamels, fabrics and the like, in the designing and making of which quite as much taste and skill are manifested as in the painting of pictures.

The reason why craft shows are so difficult to house is that they require floor space, and all, or nearly all, the galleries are let in the evenings for dances. For such, of course, a clear floor is needed. Pictures are on the walls, but crafts for the most part must stand on the floors, and then the cases have to be removed whenever there is a dance, which is generally every night. This removal entails a great deal of work, and risk to the contents of the cases.

The ideal arrangement, at least in theory, would be for the members of the various art societies to combine to form a company for the provision of a big gallery in some part of the West End. Under the management of some efficient business secretary surely such a scheme is bound to succeed. There are so many exhibitions needing accommodation that the galleries could be let almost throughout the year, and in these days when lifts are so generally used it would not be necessary to have a ground or first floor for the purpose. Economically the building of a big gallery on a ground or first floor would probably not be sound.

It seems as if the scheme were well worth consideration. Whatever the solution, the need is very real and pressing.

But while regretting the scarcity of big galleries it is well to consider some of the reasons which may have led to that lack. It is largely due to the fact that running such galleries for picture exhibitions has not generally been a very paying proposition. The galleries are commercial ventures, and if they paid better there would be more of them. The owners can hardly be blamed if they prefer to let their premises for cinemas or for dancing.

How, then, can the running of galleries for picture exhibitions be made to pay better? To a considerable extent I think the answer rests with the individual artists, in the case of one-man shows, or with the societies which hold exhibitions of their members' work. The artists, individually or collectively, must be prepared to do more to help the owners of the galleries to sell the pictures, and must see it is not enough to paint good pictures. In short, they must be prepared to advertise their work, not in the narrower sense of the word, but in its wider application, that of securing publicity. Artists as a class live secluded lives, coming very little in contact with the outside world, and they approach a gallery owner too often with the idea that an exhibition of their work is bound to attract attention. Frequently it entirely fails to do so. Artists therefore must be business men and not feel that their pictures can be sold without any effort on their part. I do not by this mean so much that they should be the actual salesmen—I will refer to that point later—but they should provide the facilities that shall help to produce sales.

One of the chief ways in which this can be done is by giving liberal opportunities for the reproduction of their pictures in the illustrated papers. Such editorial notice is one of the finest advertisements a man can have, and it costs nothing beyond the expense of taking a few photographs. And yet many artists insist upon charging a copyright fee to the journal which desires to reproduce their pictures, and thus discourages the very agency which can help them so materially. It is not fair of the artists to make a periodical pay to advertise them, and suggests that they suffer from too great a sense of their own importance. What the artist, or the society holding the exhibition, ought to do is to take photographs of a few of the pictures most suitable for the purpose and then notify the Press when sending out tickets for the exhibition that these photoprints will be supplied free of all charge. Most illustrated papers are quite agreeable to insert some of the pictures on this basis. A picture in a daily or weekly paper will be regarded carefully by people who would never take any notice of a reference to it in the letterpress.

Surely this chance, almost certainty, of securing such an advertisement is worth a speculative outlay of a few pounds? The artist therefore should realise that his outlay is not at an end with the hiring of the gallery, and that he cannot expect to win even a small measure of fame without any cost to himself, once his art training is concluded, any more than any other professional or business man can expect to do.

To revert to a point already mentioned, I would not advise the artist to do very much in the way of trying to sell his pictures to the visitors during the exhibition. For this purpose the owner of the gallery provides a salesman or saleswoman who is exceedingly clever at the business. He or she is specially trained in the very difficult art of salesmanship, and the painter cannot expect to be their equal therein. Moreover, it is rather embarrassing to the possible purchaser to be pressed to buy by the artist, because the former does not like to hurt the artist's feelings, and cannot speak quite freely as he could to the agent.

With regard to the terms between the artists or societies and the gallery owners, I think there should be some working arrangement between the two parties on a basis of both rental and commission. A commission basis alone is not sufficient for the gallery owner, if he has to send out the invitations to the Press, do some advertising, in the ordinary sense of the word, and remunerate his salesman. It must be a case of mutual sharing of expenses and profit.

Galleries, therefore, say their owners, will not increase in number in London so long as the artists maintain their present attitude, because they are not a business proposition. The artists must put up a little money as a legitimate business speculation if their shows are to be a success, and

if in addition they can paint pictures which are a little out of the ordinary they will have done much to make their exhibitions more attractive. As things are now there is a terrible sameness about picture shows. The painter must aim to attract the public in some way or other, not necessarily by painting pot-boilers or "pretty" pictures. If he can, let him be original, though I admit that is asking a great deal of any man. A picture with a "News" interest is particularly likely to win notice from the Press.

NICHE FIGURE: MADONNA AND CHILD.
ALLAN HOWES, Sculptor.
On view at the Seven and Five Society Exhibition, 5 Old Bond Street, W.1.

International Building Congress.
Preparations in Paris.

Paris is already preparing to welcome the delegates to the Fourth International Building and Public Works Congress (Congrès International du Batiment et des Travaux Publics) which—organised by the French National Federation of these Industries, under the patronage of the President of the Council and the Ministers of Public Works, Commerce and Labour—will hold its sittings in the French capital from June 15 to 21, 1925.

Every effort will be made to render this notable gathering not only fruitful from a practical and professional point of view, but festive in the best sense of the word. The programme embraces a wide range of studies and inspections pertaining to the work of the Congress, and a series of brilliant social events. It is the ambition of the organisers to combine utility and amusement in an elegant and effective manner worthy of the best traditions of French metropolitan hospitality.

All States, members of the League of Nations, are being invited through the respective Ambassadors, to participate in this réunion. The great world centres will also individually receive invitations. America is sending numerous representatives. It is hoped that England and the British Dominions will furnish an equally important proportion of delegates.

Amongst the preliminary questions which have given rise to many exchanges of views and comprehensible differences of opinion, is the expediency of inviting the concourse of Germany and Russia. Reasons of interest favour an affirmative decision. The delegates of these two nations are susceptible of contributing enlightening facts and appreciations to the study of the problems submitted to the Congress. Furthermore, their respective countries must necessarily undertake in the near future important works which, because of the obvious interest they present, render their presence at the Congress highly desirable. It is believed that the necessity of renewing relations suspended since before the War will prevail against the resistance that retards the invitations.

The programme arranged is as follows:

M. Despagnat, President of the Fédération Internationale du Batiment et des Travaux Publics, will preside over the business meetings of the Congress. He will be assisted by M. Van Ophem, Vice-President and General Delegate.

The Congress will open punctually at 10.30 o'clock on Monday, June 15. Its programme reveals, in its chief features, an eagerness to exhaustively explore the many-sided problems created by the general housing crisis.

Amongst the principal questions to be treated are: (*a*) The habitation crisis and the remedial means advocated or employed in the different countries, especially with reference to middle class housing. (*b*) The new methods and processes susceptible of reducing the cost of construction. (*c*) The development of apprenticeship, in order to compensate, as far as possible, for the losses sustained through the War by the building trade and public works. (*d*) The search of "new formulæ" permitting the efficient execution of great public works. This latter subject will be examined in the most far-reaching manner possible and will involve a detailed study, with copious references concerning the unification of the principal clauses of specifications of the great works of all countries.

VISITS AND EXCURSIONS.

On June 16—second day of the Congress—visits will be made in autocar to a typical group of "cheap dwellings," to the building yard of an enterprise of construction of "moderately rented" houses and to a city garden. In the evening there will be a gala performance at the Opéra House.

Wednesday, June 17, will be devoted to excursions. The delegates will be conducted to the dirigible balloon and aviation sheds of Orly and to the Sainte-Assise wireless station. June 18 is the date of the closing sitting and banquet, and on the 19th there will be visits of foreign delegations to the various Paris building and public works professional corporations.

The following days will be taken up with extensive excursions: Two, reserved for the Liberated Areas, will be spent in Rheims and in autocar trips to the famous Chemin des Dames. Their French colleagues are anxious to show the visitors what a splendid effort is being made to restore the ruins of the devastated regions. The very striking work which has been achieved by the Northern Railway Company in the Tergnier centre will be inspected with particular interest.

One of the voyages in preparation will have for its object the study of a number of important public works in course of execution, and notably an immense dam. During the final excursion, which will last at least a week, the delegates will probably visit Marseilles to see the recent extension of the port and the canal-tunnel of Rove. The Grenoble *Houille blanche* (Water Power) Exhibition will also be visited, as well as a selection of classic excursion centres.

During the sittings in Paris the delegates will be received at the Elysée by the President of the Republic and at the Hotel de Ville by the members of the Paris Municipal Council.

On the whole, the Congress promises to be both an impressive manifestation of professional activity and a succession of brilliant and agreeable social functions.

W. W. O'M.

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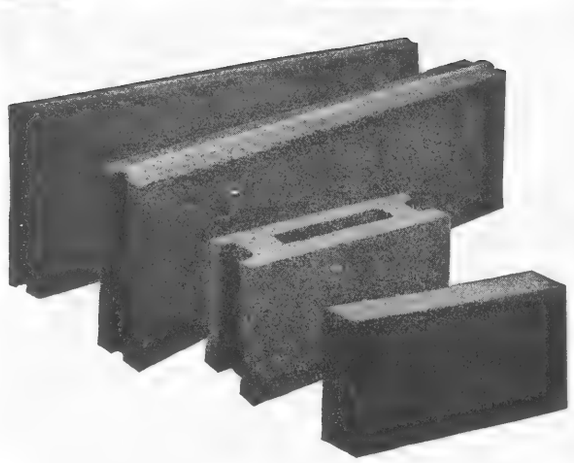

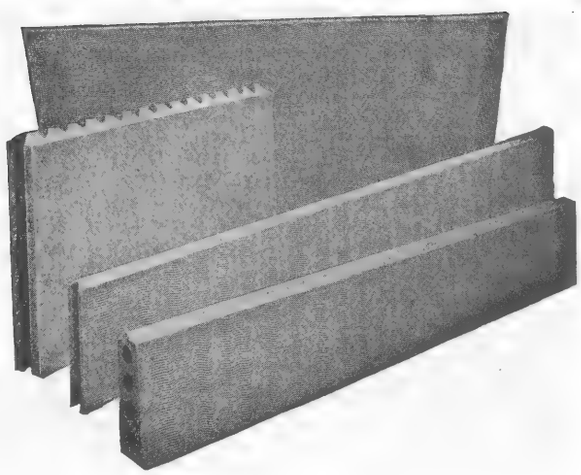

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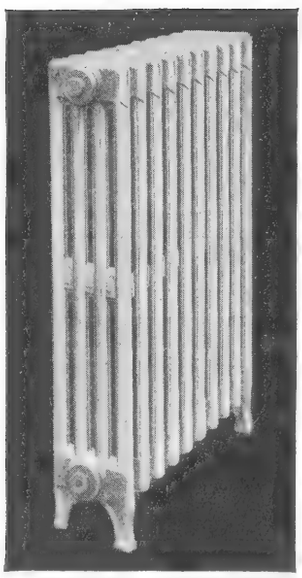

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Urban Amenity.

Eighth Lecture by Professor William Haywood at the Birmingham University.

Of the several factors which contribute to amenity in the material condition of towns—other than beauty of situation—a consistent scale and manner are most important, and most difficult to secure. Consistency of general effect is sometimes attempted by the imposition of a uniform style of building; sometimes reliance is placed upon one-man control as a means for securing the necessary cohesion. These methods, however, can only result in a consistency of mediocrity; with no prospect of any distinction of manner unless handled with genius; and in that case, too, they must still fail in representative character. In these days, the true source of urban amenity lies in the disposition of the populace; and is best moved by the stirring of many minds towards a high standard of general excellence.

Towns which have become large only by the multiplication of small parts will usually be deficient in a scale appropriate to their new size. We have provincial towns in England of an importance, population and wealth, which, for adequate expression, require an almost metropolitan character in their equipment; yet they remain so ill provided with civic and social accommodation proportioned to their condition, that their people appear unsuited to the larger life that the growth of their environment has made possible.

The value of amenity in towns can be most effectively demonstrated by the great building periods of the past, when beauty was thought to be as essential a factor in city life as convenient and rapid transit facilities are to-day. But while the past may stimulate by example, it cannot properly serve as a model. Modern towns which seek to give their growth an appropriate expression must effect this by an imaginative treatment of their own vital energies. Industry and its equipment have much potential beauty; and the predominate occupation of all towns, whether it be industry or not, should be regarded as an essential factor in the determination of an amenity suitable to local conditions.

The Trend of Modern Town Planning.

Ninth Lecture by Professor William Haywood at the Birmingham University.

The Town Planning Act of 1909 marks an important date in town development. Government approval was then secured for a policy of progress, subject to a preconceived plan, and embodying certain new principles of house design and site arrangement, the excellence of which had been advocated and tested by reformers during the preceding twenty years.

Prior to 1909 town planning conditions in all countries were represented by the development of characteristic local tendencies; and had not yet the comprehensive form they have to-day.

Since 1909 these tendencies have matured; and have been augmented by the interchange of international experiences making for progress on broader lines. For example: the feeling for corporate expression which is so marked a feature of continental life, and out of which arises the very conception of town planning, has been supplemented abroad by the adoption of the best fruits of English individualism. The individual home, the limitation of houses to the acre, and the economic design of exclusively residential roads, are now universally accepted as preferable in most cases to tenement buildings, and roads for all purposes.

In a similar manner, American schemes for municipal recreation and her experiences with zoning, are valuable aids to wider views elsewhere; and by thus engrafting the best experience of others upon local practice (with a due regard for the preservation of local character) town planning progresses towards a full development of many still unrealised possibilities. Town planning, in the modern sense of the word, is of comparatively recent growth; yet actual work upon town problems already shows, that in some respects it is closely related to wider regional needs; as these in their turn are related to the still greater problem of national organisation.

In one respect the Town Planning Act of 1909 is deficient. Although largely inspired by a desire for greater amenity, the promoters of the Act failed to provide any adequate method for giving legal assistance to this end. Public opinion, however, is moving towards an appreciation of beauty in future work; and in this new interest we shall find scope for giving to our towns an uplift in outward expression which so many of them lack.

Correspondence.

"Paravan"

To the Editor of THE ARCHITECT.

DEAR SIR,—I have been requested to obtain a few samples of a new British building material called "Paravan," and should feel extremely obliged if you would kindly advise me where this material may be procured.

Thanking you in advance for your kind assistance in the matter.

Yours, etc.,
THE CONSUL GENERAL OF DENMARK.

"The Architect" Fifty Years Ago.

DECEMBER 12, 1874.

THE WIDENING OF LONDON BRIDGE.

A petition signed by 3,633 merchants and traders has been presented to the Court of Common Council, and which sets forth the inconvenience and positive pecuniary loss that the trading community suffer by the crowded and often impassable state of the thoroughfare for vehicles on London Bridge, as well as the great danger and numerous accidents to foot passengers from the overcrowding. The committee for letting the Bridge House Estates have been in consequence asked to report upon the best means of affording additional accommodation for the traffic across the bridge. Several methods have been proposed of increasing the width of the bridge. Footways carried by cantilevers have long since been suggested. A cast-iron archway erected in front of the present structure is another project. A very ingenious plan has also been proposed by an anonymous correspondent of "The Times," and which consists in taking down the existing stone facing of one side of the bridge and rebuilding an extra breadth of some 20 feet or more, and refacing it again with the present stones. And in connection with this it may be stated that when the contract was first taken to build the present bridge it was not for the structure as it now stands; but the bridge, as contracted for, was 12 feet narrower than it was now, and £150,000 were added to the contract to make the bridge its present width.

The Committee of the Corporation will, it is hoped, look at the other side of the question, and consider whether the structure as a piece of construction and a feature of the City is not entitled to be preserved intact, and may not be so. As an engineering correspondent of "The Times" says, "London Bridge having been built at a vast expense, the quality of the material, the dimensions of the arches, the foundations being all of the most durable that could be conceived, the design itself being the result of the past experience and accumulated knowledge of the most accomplished bridge architect this country, or perhaps the world, has produced (for although Sir John Rennie carried the works into execution, the designs were approved and made from the reports of his father, John Rennie), it is to be hoped, before such projects as those now proposed are sanctioned, that due consideration will be given to see if increased facilities to traffic may not be obtained in some other way."

But the most interesting letter yet published on the subject is one from Mr. Colleton Rennie, who, as the only son of Sir John Rennie, has claims to be heard. He says:—"London Bridge, from even before its completion, has been the favourite *corpus vile* on which amateur architects have sought to experimentalise. The cantilever system, in particular, has had numerous admirers, and I remember when last it was proposed that my father expressed himself strongly as to the dangers of the plan. When I said that I thought the only feasible mode of widening the bridge, if really necessary, would be the plan adopted on the Victoria Bridge of the London, Chatham and Dover Railway, he quite confirmed my opinion.

EAST HAM.—Plans passed: 55 houses, Eustace Road, for Leyton Building Co.; 23 houses, Holland Road, for Mr. W. Robinson; 10 houses, Clements Road, for Mr. W. Robinson; 5 houses, South Esk Road, for Mr. J. Walker; 22 houses, Sandford Street, for Messrs. Herepath Bros.

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PRESTON	26 HOUSES	ROTHERHAM	25 HOUSES
KINGSWOOD SURREY	24 HOUSES	BLACKPOOL	18 HOUSES
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General News.

BRADFORD.—The Corporation propose to grant another 250 housing subsidies.—Tenders are to be invited for the erection of douche baths at McMillan School at an estimated cost of £887.—A new site is to be purchased for the Thornton Grammar School.—A sub-generating station is to be built and equipped at Four Lane Ends at a cost of £18,000.—Plans passed: 12 houses, Wheatlands, for Heaton Estates Co., Ltd.; 8 houses. Springoyd Terrace, for Mr. Fred Leach; 5 houses, Briggs Place, for Mr. Fred Briggs; 5 houses, Nursery Road, for Messrs. Patchett, Ltd.

BRISTOL.—Housing Committee recommends existing contracts be made for the erection of 560 houses on the various estates.

BIRKENHEAD.—The market roof is to be renewed at a cost of £6,000.—It is now suggested that the most suitable site for the proposed art gallery is that fronting Park Road East.—A site in Higher Bebington is to be purchased for a sub-station.—Plans passed by Town Council: layout of street off Lingdale Road.

FALMOUTH.—The Town Council are to improve Groove Place at a cost of £6,000.—Negotiations are proceeding for a widening at the Royal Hotel corner, estimated to involve an outlay of £6,000 to £7,000.—Subsidies are to be paid for the following houses to be erected: 5 houses, at Penwerris, for Messrs Strongman & Sons; 8 houses, North Parade, for Messrs. Harris Bros.

HASTINGS.—Premises in Wellington Square are to be acquired and adapted as office accommodation for the Council at a cost of £2,382.—Plans passed: extensions, Imperial Hotel, Queen's Road, for Mr. P. H. Oxley, extensions, St. Leonards, Adelphi Hotel, Warrior Square, for Mr. Henry Ward.—The subsidy is promised for the six houses in Berlin and Edmund Roads, for Messrs. Maidwell and Emerton.

HULL.—A site is being secured for the proposed secondary school at East Hull.—The city architect is to advertise for tenders for the erection of a third pavilion at the infectious diseases hospital.—Road improvement schemes are to be carried out at a cost of £156,000.—Plans passed: 7 houses, Cottingham Road, for Mr. Barnett; 8 houses, Lee Street, for Mr. J. E, Wray; 8 houses, West Side, for Mr. J. E. Wray; 8 houses, Brindley Street, for Mr. G. Needler.—The Corporation has accepted the tender of Mr. F. Bilton to erect 200 houses for £94,992.

HANLEY.—Plans passed: warehouse, Garner Street, for Messrs. Twyfords, Ltd.; additions, Victoria Road, for N.S. Workshops for Blind; additions, Providence Chapel for Trustees; addition, foundry, Ivyhouse Road, for Messrs. R. Goodwin and Sons; two houses, Albany Road, for Mr. Jervis.

LEWISHAM.—Plans passed by Borough Council: 19 houses, Como Road, for Messrs. Egram and Co.; 5 houses, Manor Lane, for Messrs. Scudmore, Ltd.; 22, houses, Ewhurst Road, for Mr. A. J. Glock; elementary school, Downham estate, for L.C.C.; house, Canonbie Road, for British Economy Association, Ltd.

LUTON.—The Town Council have agreed to subsidise a further 200 houses.—Plans passed: 20 houses, Cavendish Road, for Mr. C. Jeyes; 4 houses, Argyle Avenue, for Mr. A. Mardle; 4 houses, Selbourne Road, for Mr. J. Wallace; 12 houses, Richmond Hill, for Messrs. Cole, Ltd.

LEEDS.—Tenders are to be invited for the erection of 500 houses at Middleton, Cross Gates and Meanwood, lay-out plans for which have been prepared by the city surveyor.—It is proposed to sell 5½ acres with buildings, part of the Victoria Cattle Market estate to Schweppes, Ltd., for £6,000.—A branch library is to be erected at Hunslet at a cost of £9,000.—Fresh tenders are to be invited for the installation of atmospheric heating at Hunslet baths.—The following houses are to be erected under the subsidy scheme: 4 houses, Old Lane, for Messrs. Roddy and Sons; 4 houses, York Road, for Messrs. Harrison and Co.

MITCHAM.—Surrey county architect has been asked to prepare plans for a central school.

MERTHYR TYDFIL.—Mr. David Williams, Penydarren Brick Co., has informed the Town Council that he is contemplating dismantling the works, but thought possibly the Council might be prepared to purchase all bricks required for housing if the works were re-opened and also consider the question of granting him some relief in the way of rates. The matter has been referred to a sub-committee to report upon.—Tenders are to be invited for erecting 46 houses at Heolgerrig.

OSSETT.—Councillor Illingworth has given the Corporation land in Manor Road for a recreation ground.—Property is to be purchased for a scheme for a new street from Market Place to Leeds Road.—Plans passed: new street off Belgrave Street, for Dr. La Touche; warehouse, Moorcroft Mills for Messrs. Hepworth Bros.; engine house, Ings Mills, for Messrs. Mitchell and Co., Ltd.

PLYMOUTH.—A committee of the Corporation are considering the provision of an indoor swimming bath.—A site is to be reserved at Shute Parl estate for the erection of a School of Art and a Women's Technical Institute—A scheme has been approved for the erection of flats and houses at Stonehall at a cost of £21,659.—Tenders are to be invited for the erection of houses by patent systems of construction on the basis of a specification prepared by the surveyor.—Revised plans are to be prepared for increasing the accommodation at the central police station at a cost of about £4,000.—It is suggested that the three huts at the Swilly Hospital be adapted for the treatment of cases of tuberculosis at a cost of £2,300.

STOKE-ON-TRENT.—The Corporation are considering extensions at Stoke baths.—The Ministry of Health have sanctioned a loan of £3,000 for the extension of the markets.—New wards are to be built at Bucknall Hospital at a cost of £8,250.—The question of the provision of police stations at Hanford and Trentham is under consideration.—Plans passed: 14 houses, Trentham Road, for Mr. Orme; extension nurses' home, Hartshill, for N.S. Infirmary.—The Town Council are to invite tenders for the erection of 54 houses on different sites.

STRETFORD.—The Ministry of Health have sanctioned a loan of £18,220 for the erection of a central school.—Plans passed: sewering, Wordsworth Road, for de Trafford Estates, Ltd.; 52 houses, Ravenswood Road, for Mr. George Russell; 6 houses, Seymour Grove, for Mr. George Russell, central school, Gorse Hill, for Education Committee; biscuit factory, Ayres Road, for International Bakery Co.

SHEFFIELD.—The Ministry of Health have sanctioned a loan of £371,113 for the eighth instalment of houses on the Manor & Gleadless Common estates. A site in West Quadrant has been sold to the Churchwardens of St. Cuthberts for the erection of a Mission Church.—Plans passed; 5 houses, Tullibardine Road, for Mr. W. Fox; 6 houses, Brooklands Crescent, for Mr. R. Watson; 6 houses, Chesterfield Road, for Mr. Robert Jones; 6 houses, Havercroft Road, for Mr. E. Sivil.

SHREWSBURY.—A super power station for the West Midlands is to be erected at Ironbridge, ten miles from Shrewsbury.—The English Bridge is to be reconstructed at a cost of £80,000.

TORQUAY.—Loans totalling £17,000 have now been sanctioned for the reconstruction of the South Pier, etc., and the Town Council are to invite tenders for the work.—Plans passed: 6 houses, St. Georges Road, for Mr. Chas. Dear; layout for 13 houses, Norton Road, for Mr. J. Stoneman; additions, Imperial Hotel, for Hotel Company; additions to wards, Rosehill Hospital, for Trustees.

WAKEFIELD.—The Town Council have arranged to erect 800 houses, and a committee have been appointed to select sites.—4 houses are to be erected at Lupset of the Roger system of construction at a cost of £1,800.

Trade Notes.

Messrs. Marshall, Sons & Co., Ltd., Engineers, Britannia Ironworks, Gainsborough, Lincolnshire, inform us that from January 1, 1925, they will be the sole British concessionaires and manufacturers of the world-famed "Cummer" asphalt plants. The whole of the machinery will be constructed at Gainsborough, where a special department has been laid out and equipped for its manufacture. Mr. Ivan W. Benson, Bush House, Aldwych, London, W.C.2, who has had many years experience with machinery of this class, will act as sales representative for the "Cummer" plants and for a new line of concrete mixers which Messrs. Marshall, Sons & Co., Ltd., are also placing on the market. Our readers are well acquainted with the high-grade products such as steam road rollers, portable steam engines, traction engines and oil engines, which are made at the Britannia Works, and excellent results are confidently expected in connection with the latest additions to the firm's lengthy list of manufactures.

Mr. H. C. Iveson, late Sales Manager of Messrs. Medway's Safety Lift Co., has been appointed Sales Manager to Messrs. R. A. Evans, Limited, Lift Engineers, of Leicester. Mr. Iveson's office is at Avenue Chambers, Southampton Row, London, W.C.2. Telephone Number, Museum 3240.

New Calendars for 1925.

Messrs. Callender's Cable and Construction Co., Ltd., Hamilton House, Victoria Embankment, E.C.4, have sent their calendar for 1925, which gives a view of the River Thames at Erith Reach, the colouring of which is bright and refined.

VOL. CXII.—2922. THE ARCHITECT DECEMBER 19, 1924

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Architectural Composition.*

For the greater part of a century architects have concentrated their attention rather on the details of design of different styles and types than on a consideration of the fundamental principles which underlie the successful treatment of masses, but to-day the tendency is to reason backward from the general to the particular, from mass to detail.

In his very readable and clearly expressed book, Mr. Howard Robertson has treated the subject in chapters which deal with Unity, the Composition of Masses, Contrast, Secondary Principles, Character in Design, Proportion in Detail Scale, Plan Composition and its Relation to Elevation, and the expression of Function.

It is illustrated by a number of small sketches, which for the object of such a book are more useful in indicating the author's points than finished or elaborate drawings would be. To some such a book serves chiefly as a reminder of considerations they have instinctively followed; to the student it is invaluable, and will serve to eliminate much disappointing drudgery in the early stages of designing.

No book, and no course of study can make a designer, but such a book as this will make a student observe and think, and will afford a means of eliminating what is bound to be unsatisfactory, because essential principles of good composition are violated.

We are glad to note that the author discards the fetish of an exact system of proportion regulated by mathematical formulæ or rules, contenting himself with the statement that the repetition of proportions or forms in any one building tend to establish a pleasing system of proportioning for that building in itself. In this way we have the unit created by the spacing of sash bars in a window which give a scale or module which should be followed in other windows in the same building. The proportioning of the windows of a Georgian building become in this manner almost as delicate and exact a system as that which regulates the proportions of columns and their entablatures, while the proportions of a sashed square may reasonably bear some definite relation to that of a whole front.

Mr. Robertson is also—rightly as we think—critical of the extent to which formalism is now often carried in the design of smaller houses. Such formalism is admirable—on paper—but often absurd in reality, while the search for it frequently blinds the designer to better methods and arrangement.

Good asymmetry is as important as symmetry, while to adopt it successfully needs a far greater exercise of imagination and a keener sense of proportion.

There are many who seem to look on what is picturesque as being an evidence of error, a mistake due to the fact that asymmetry cannot be studied as a system, and does not conform to rules. Also successful asymmetrical composition is dependent to a far greater extent than anything else on accurate knowledge of the surroundings of a proposed building.

Plan composition in larger buildings especially is all important, and is very well dealt with by Mr. Robertson, and this part of his book will be found especially useful by students.

One of the best sections of the book is that devoted to the consideration of scale in buildings, for it is in this particular that much of our modern work is at fault. It is, as stated, an excellent exercise to note the actual size of features on buildings, for there has been far too much indiscriminate copying of features which, satisfactory in a building of a certain scale, are wrong in a building either of greater or less size, and we are at one with the author in his warning against allowing the importance of proportion and general conception to make the designer think that detail can be safely omitted. We are sure that buildings like those of the modern Dutch and German school of design, in which design is reduced to mass, punctuated by window gashes, is but a passing phase, and that the public will not be permanently satisfied with buildings which could be accurately shown in every particular by a small plasticine model. Most modern buildings could be divided into two groups, the first consisting of those buildings which are over elaborated, and the other of those which are unduly bare, and comparatively few designers seem able to adopt the happy mean. The measured drawings of some of the great buildings of the past show us better than anything else what this mean is, for many of them would look bare side by side with modern competition drawings, while none of them would in the least resemble the compositions of the modern Dutch school or the buildings of Louis Sullivan. The great skyscrapers of America are among the only buildings in which detail becomes relatively important, and the effect of the best of them are largely due to the detail of the lower and upper storeys which serve as a foil to the monotony created by ranges of similar sized windows. We doubt whether American opinion was justified in considering Eliel Saarinen's conception of the "Chicago Tribune" building a better one than the more stylistic design finally chosen.

At the same time we have often felt that in many ways it would be a good thing if something like a sumptuary law could be made to govern the design of buildings of a purely commercial and utilitarian character, where the employment of ambitious schemes of detail does seem definitely out of place. It seems unnecessary and out of place when buildings which people hurry through for purely practical purposes, are treated like public buildings, and where the employment of costly and elaborate detail seems clearly out of place.

But so long as such buildings are largely considered by the building owner as an advertisement of their importance, these things will be, unless the public shows its distaste of features which, far from enhancing the value of architecture, make it the handmaid of a vulgar display.

C

* "The Principles of Architectural Composition," by Howard Robertson. London: The Architectural Press, 2 Queens Gate, Westminster, S.W.1. 10s. 6d. net.

Our Illustrations.

"THE TIMES" BUILDING, BRITISH EMPIRE EXHIBITION, WEMBLEY. Oswald P. Milne & Paul Phipps, Architects.
THE "LEICESTER MAIL" OFFICES, LEICESTER. Stockdale Harrison & Sons, Architects.
ST. PHILIP'S BAPTISTRY, PLAISTOW. Nicholas & Dixon Spain, Architects.

Notes and Comments.

MODEL OF WELSH NATIONAL WAR MEMORIAL. J. N. Comper, Designer.
In the centre are three figures: A Sailor, Soldier, and Airman. There is to be a fountain in the middle. The wording round the top reads: "To the Sons of Wales who gave their lives in the war, 1914–1918."

A Higher Skyscraper.

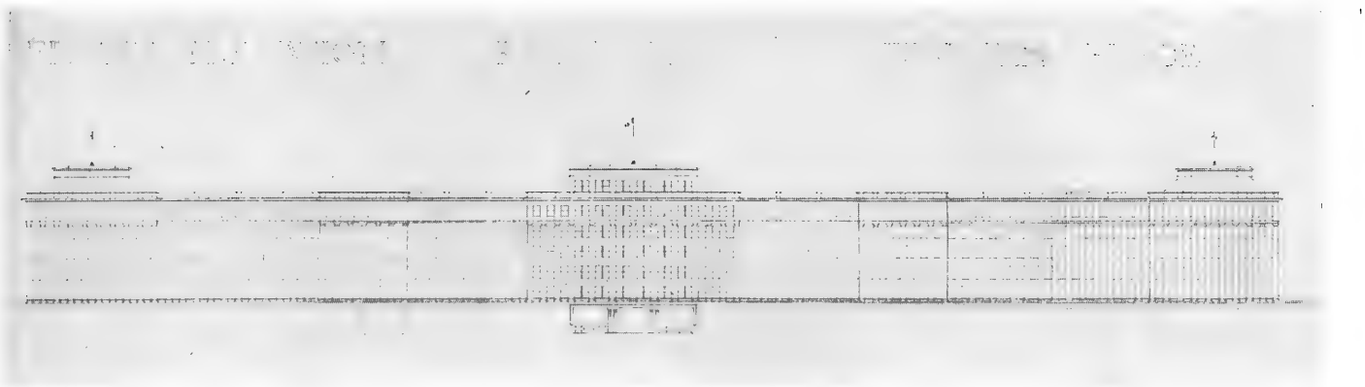
In spite of the conclusive nature of the proof that the skyscraper does not pay as a commercial proposition we understand that it is proposed to erect another in New York which will dwarf the 792 feet height of the Woolworth Building. The new structure proposed is to be one of 88 storeys, which would mean a height of over 900 feet. We understand that to comply with the provisions of the Zoning Laws now enforced such a building would involve much setting back from street frontages, but even that does not do away with the fact that its erection would create further traffic congestion, and, judging by analogy, could be only approved on commercial grounds if it is considered merely as a trade advertisement. We hope the proposal will not meet with success.

The National Welsh Memorial.

We illustrate the design for the National Welsh Memorial which it is proposed to erect in front of the Town Hall and Law Courts at Cardiff, and we fully understand why its erection there should be objected to. What we are unable to understand is that its erection on any site should find favour, for it seems to be both unimpressive and ill-conceived. It has neither dignity or character, and rather resembles the sort of ornamental construction that finds favour in a fair or place of public exhibition. It suggests to us an ornamental setting to a cotillon or dance figure, and we could understand a figure holding garlands in the centre, the bearers of which tripped round the centre figure, themselves encircled by a ring of composition columns! We hope this proposal will be emphatically downed and the money better expended.

The City Churches.

We agree with Lord Hugh Cecil that the proposed measure entitled the Union of Benefices and Disposal of Churches (Metropolis) Measure which is to be submitted to Parliament should effectually safeguard the City Churches. The Bishop of London's proposal for the removal of a church would have to be communicated to the Board constituted under the Act and to the Fine Arts Commission, who would have the opportunity of reporting on the scheme at the outset. We think that Lord Hugh Cecil is right in thinking that a proposal to which strong objection were raised would never go beyond this stage. If, however, it did it would have to be considered by a Commission consisting of five members, two nominated by the London Diocesan Conference, two by the City Corporation, and one by the Lord Chancellor. If the proposals are approved by this body, a scheme is prepared and after full publicity submitted to the Commissioners of Works, the Ancient Monuments Board, the Royal Academy, the R.I.B.A., the Society for the Protection of Ancient Buildings, the Society of Antiquaries and the Royal Fine Art Commission. The scheme has finally to be sanctioned by the Privy Council. We think this very complete series of checks will probably prevent the demolition of any church, as at every stage it seems the opponents of demolition would be likely to be in a majority, while those financially interested would almost always be in a minority.



FRONT ELEVATION: ROYAL HOTEL, WOBURN PLACE. By Mr. C. Allerton Rowbotham.

The Royal Hotel, Woburn Place.

The Imperial Hotel possesses a long narrow strip fronting Woburn Place, which they intend to develop for hotel purposes. We learnt that they thought they could do their own planning better than any architect, but they sought elevations by a competition. They would not appoint an assessor, and the competition was therefore barred by the R.I.B.A. We understand that all they wanted was that the design should be cheap and good enough to satisfy the authorities of the Bedford Estate. They have obtained their design, which we illustrate, and it must be a consolation to us to think that in these days of rapid motor transit many will pass it very quickly. We should say it is certainly cheap, and for a factory or warehouse design it may have points. We hope the Imperial Hotel Company will not be too modest but will publish their plans, as we should much like to see what they consider they can do better than any architect!

FLATFORD BRIDGE, SUFFOLK.
This bridge figures in some of Constable's greatest pictures, and it is now likely that it will be permanently protected.

Considerable interest will be evoked in the artistic world by the offer of Sir Arthur Churchman, M.P., to give the group of buildings at Flatford, with about nine acres of land, on the banks of the Stour, above and below Flatford Lock, to the Royal Academy of Arts or any public body on condition that they put them in repair and maintain them. The buildings consist of Willie Lot's House, exhibited at the National Gallery as the "Valley Farm," also seen on the left of the "Haywain," Abram Constable's house, and Flatford Mill. Mr. W. H. Anderson, of Hoylake, Cheshire, and some friends have offered to contribute about £1,000 to the endowment of a landscape school on the condition that it is open to all students who can pay the fees. At present the Royal Academy provides free tuition to all artists qualified to receive advantage from such studies as are to be obtained at Burlington House under the regulations expressed in the by-laws. Those who are promoting the present scheme do not want their landscape school to be restricted, but to be at the disposal of students from any part of the Empire who can pay their fees.

Mr. H. P. Hain Friswell, the artist, advocating the project in a letter to "The Times," writes: Suffolk has produced Gainsborough and Constable in the Valley of the Stour, and Norfolk Crome, Cotman and the Norwich painters. This part of East Anglia has physical and meteorological advantages for open-air study throughout the year, and Flatford, its nearest point to London, forms a salient from which access is obtained to study inland river, a valley of lush meadows, fine trees, gentle hills, and picturesque villages for twenty miles in one direction, with marshland, estuary and sea coast for twelve miles in another, embracing the whole of Constable's country." The proposal is one that will appeal to landscape artists, who have already in advance been promised the support of Sir David Murray and Mr. W. L. Wyllie. We have all heard of the Newlyn, the Glasgow School, the Norwich painters, and similar coteries of eminent artists. It would be a splendid memorial to the name and fame of Constable, who has already revolutionised landscape art in this country, if a group of artists closely associated with the Valley of the Stour should carry the tradition of English landscape painting to a still more definite point.—From the East Anglian "Daily Times," December 10, 1924.

Rye and Winchelsea.

J. R. Hutchinson.

MERMAID STREET, RYE.
From a sepia drawing by J. R. Hutchinson.

Of all the places I have visited in England, I place Rye as quite unique; it stands alone and unrivalled. At first one might say how foreign it is; but no, it is essentially English. You can see at a glance it is a burgherstown; it is essentially of the sea—of the South. It stands on an isolated rock of sandstone, and for 20 miles round it is perfectly flat, and upon it is a clustering mass of red roofs, culminating in one of the finest churches in all Sussex. Once an island, the old coast line lies only about half a mile to the north, and to the south two miles of marsh land stretch to the sea, which, not so far back, used to come to its base. Two miles westward lies Winchelsea, facing Rye over meadows where ships sailed in the old days.

Rye, in the past, was one of the places where foreign attack was most to be expected; hence it was necessary that the town should be strengthened with defences, and these were begun in Richard the First's time. During Edward the Third's reign were built the walls and the two gateways, one of which remains in the Landgate we see there to-day.

The most famous of the defences is the Ypres Tower, which was built in 1135 by William of Ypres, and bears the marks of many of the foreign attacks upon it.

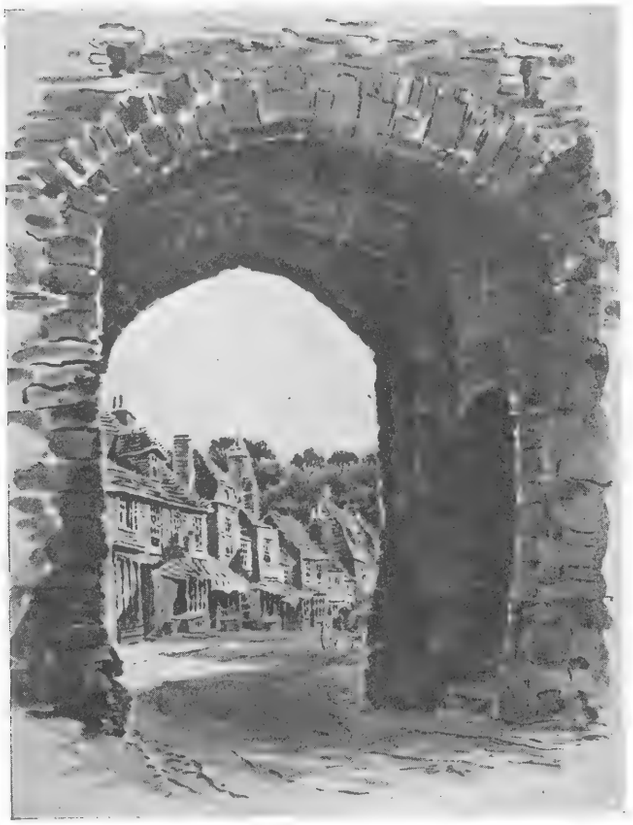
The charm of Rye lies in the quaint old streets, such as Mermaid Street, Watchbell Street, West Street and others. The domestic work in Rye is not older than the 16th century; and the Georgian period, I should say, is most conspicuous. The 18th-century front of the old George Hotel in High Street contains some old rooms, as well as a banqueting hall with musicians' gallery. Opposite the George is an old brick building of the time of Charles the First, with a row of lofty pilasters; it is Peacock's old Grammar School.

The Landgate is a particularly fine example of the Edwardian type, with its two massive towers and machicolated parapet, and deep archway. Going up to High Street, it forms a commanding approach to the town, and from it one can see the whole of the 20 miles of Romney Marsh, and the distant downs behind Folkestone and Dover. Going through the Landgate and past the church and a square, we come to one of the quaintest streets of old Rye—namely, Watchbell Street, so called because from it was sounded the alarm of approaching danger; at the corner is a fine old 17th-century timbered mansion. Then we come to an old Carmelite Friars' Chapel, with a large pointed traceried window, above a triple lancet window. But the most interesting relic of the old times is the Ypres Tower at the south-east corner of the churchyard. It forms a square, with a tower at each corner, with a single room above and below, a complete example of the 12th-century defensive architecture. As the tower is close to the church, we will go on to it and examine it. Its ample proportions and evidence of work of successive centuries give it a character in keeping with the place itself. It contains a transition Norman nave and clerestory, and side aisles of later date, a tower space and north and south transepts. The earliest Norman work is two side aisles, at the east end of either nave aisle, and some arcading on the west wall of the north and south transepts. The choir and its chapels are partly Early English and partly Perpendicular. A very unusual feature in the church is the long pendulum of the famous old clock, which swings slowly in full view of the congregation, above the choir. The famous old sixteenth-century clock on the north front

WEST STREET, RYE.
From a sepia drawing by J. R. Hutchinson.

of the tower is flanked by quarter boys nearly 5 feet high, made of oak and gilded; and these have been striking the quarter-hours for over 350 years.

When we come out of the church, we turn into West Street, a quaint old cobbled street, with some fine gabled half-timbered houses, at the end of which stands a dignified looking Georgian house, Lamb House by name, and owned for 20 years by Henry James, the author. We are now going into Mermaid Street, perhaps the most liked of all the old streets, with its famous old Mermaid Inn, so well known. It contains some fine old rooms, with oak panelling of the folded linen pattern, and a fine sixteenth-century chimney-piece, a smoking room with low oak-ribbed ceiling, a quaint corner staircase, carved oak chests, and a glorious old open chimney space 15 feet long supported by a huge beam. Another fine old building is the one called the Old Hospital, which is of the early seventeenth-century type, with three overhanging gables of half-timbering and latticed windows.



EAST STREET SEEN THROUGH THE ARCHWAY.
From a sepia drawing by J. R. HUTCHINSON.

Going down the steep dip of Mermaid Street, at the bottom of which stood the old Strand Gate, which was demolished early in the nineteenth century, we come to the Strand. Here one can wander amongst the stacks of timber and huge tree trunks, rusty anchors and delightful old relics of all kinds, the old ribs of a former smack, sunk in the mud, all forming delightful subjects for the many artists one sees sketching in this happy hunting ground, where one can see the skeleton frame of a ship with all her beautiful and delicate curves, offering splendid studies for the draughtsman.

EAST STREET, RYE.
From a sepia drawing by J. R. HUTCHINSON.

We will now take a walk over to Winchelsea, which is about two miles away. At the foot of the hill on which it stands we cross the river Brede, and by some magnificent elm trees to the steep ascent of the promontory on which it stands. We enter by the Strand Gate, which has the usual towers and deep portcullised archway. The village itself wanders picturesquely about the wide open spaces, in the middle of which stands the beautiful remnant of the old church, part of which is still used as the parish church. The chief points of interest in the village are the medieval Town Hall, the remains of the old Grey Friars' Chapel, and the three gateways, but the church is the most interesting of them all. The nave has nothing left of it, and of the two transepts only ivy-clad fragments remain, and there only remains the beautiful choir, which is now used as the parish church. The choir has a north and south aisle, each with

RYE CHURCH: INTERIOR.
From a sepia drawing by J. R. HUTCHINSON.

its own gabled roof. The interior of the chancel, with its arcade of three bays, which divides the nave from the side aisles, is of beautiful proportions, with pointed arches springing from clustered columns of Purbeck marble; this, with the great width and lofty roof of oak, gives it a very dignified appearance. The windows are large, with the rich tracery of the Decorated period. The most beautiful object is undoubtedly the sedilia in the two side aisles, with their canopied monuments over recumbent effigies. These were put up to the memory of the Alards. Gervase Alard was the first British admiral, and his effigy is in full armour. The gables which form the canopy of the tomb are profusely ornamented and crocketted, the centre gable springing from carved heads, said to be those of King Edward and Queen Eleanor.

The ruins of the Grey Friars' Chapel are still very beautiful to the eye, with their delicate workmanship. The pointed chancel arch is deeply moulded and rests on triple shafts and delicately moulded capitals. The ruins stand in the garden of the Friars, a modern house built upon the foundations of the old conventual building. The

most interesting secular building is the old Court House, a conspicuous object at the north-west corner of the Church Square. It has had a varied career in the past, having been used as meat market, prison, storehouse. It was given to the town about 20 years ago. The main building is oblong with gable roof and a panelled chimneypiece, and the arms of various mayors of ancient Winchelsea can be seen in the south windows. The most pathetic relic of Winchelsea is the old so-called New Gate, one of the original entrances to the town; I know of no medieval gateway so strangely situated, as it is now about half a mile out of the village on the Hastings Road; though there is still a fragment of the old town wall left. It was here that the French were able to gain an entrance to the place. It stands embowered in foliage looking into a deep gully, which was probably moated. The other gate, called the Landgate, formerly guarded the only road to Rye, and extended to the bottom of the hill, where was a stream which served as a moat; in 1380 the gate was destroyed by the French, and in 1404 the present structure was built by the Mayor, John Helde, whose name and coat-of-arms are sculptured over the archway.

Winchelsea has a subtle charm of its own, which others have found out. Here Inderwick, the Q.C., lived for 20 years. Millais stayed here and painted his beautiful picture of the blind girl, with its background of a rainbow and Winchelsea at the top of the hill. Turner has it in his "Liber Studiorum." Ruskin sang its praises and John Wesley preached one of his last sermons under what is now known as Wesley's tree. Ellen Terry had a charming old cottage next to the Strand Gate, to which she always came for rest and retirement.

And so we leave Winchelsea in its quiet peace and seclusion and memories of its former greatness.

Correspondence

Architectural Types.

To the Editor of THE ARCHITECT.

SIR,—Your *critique* suggests a few brief reflections upon the shortcomings of the Types.

A. This is probably the best foundation but without hard work the pinnacle cannot be attained.

B. Neither can a student gain his complete education until he has had sufficient practical experience in a Master's office and thereby obtained tuition in the multifarious duties of architectural practice. School education, however good, is incomplete.

C. Assessors and Conditions of Competitions have not been blameless in retarding the highest achievement in competitive architecture.

D. The so-called artistic architect should be the zenith of the craft, but he is sometimes apt to be lacking in practical and scientific ability.

E. The capable architect who embraces a sufficient knowledge of finance in relation to building and practices it as an integral part of the practice of architecture is the one sure hope for architecture's future. He, by reason of his opportunities, will assuredly for good or evil write the fate of architecture upon the walls of our cities. At present the superscription is frequently the work of some ephemeral ghost.

The problem, however, lies clearly before us and the remedy is apparent, yet quite neglected.

F. The so-called Provincial architect is frequently a good and capable designer and is probably nearer the ideal by reason of his accomplishments than his urban *confrère*. He, however, merely lacks the opportunity for great achievement.

G. The public, a commercial people, now require the architect to be a financial adviser in regard to his work. I, moreover, venture to think that the quality of architecture in our cities will in future be largely in ratio to the ability of modern architects to clarify the financial aspect of their work, for it will be from their completed architectural achievements that posterity will largely judge.

If, therefore, our capable architects will embrace finance in their practice and discreetly proclaim it, they will be well courted and thus be able to imprint their skill upon the future architecture of our cities in a measure greater far than can be achieved by any other means.

Architects are but human offspring of this commercial age whose route is fully disclosed. Will the æsthetic ideal be wise enough in time to tread the golden path that will lead to the preservation in a full degree of the great heritage of British architecture which is entrusted to us?

I am, Sir, Yours truly,

JOHN MURRAY.

11 Suffolk Street,
Pall Mall, S.W.
December 17, 1924.

Bridge Design.

10th Lecture Town Planning Birmingham University by William Haywood.

The general character of bridge design should be suited to its environment. In the presence of great natural effects, as in the bridged intervals of a road through mountains, it should be bold, simple, and *subordinate*. Across vast cuttings, with cliffs of great size, an appropriate design may be found—as at Clifton—in the magnificent stride of a cambered roadway of slight thickness, between pyramidal abutments of stone.

Or the Clifton problem—so far as situation is concerned—may be treated as the Romans bridged the valley of the Gard, with an amazing symphony of arches, in which the governing purpose, the carrying of a stone-built channel at a great height, is logically and superbly achieved. In this design there is harmony of scale with the rugged valley; an effect of vast strength applied to trifling labour; and there is a better scale factor than is possible with the suspension principal; yet the spirituelle manner of Clifton is at least equal in its appeal to the terrestrial grandeur of the Pont du Gard.

Great estuaries, with relatively low land masses, provide conditions favourable to emphasis in bridge design. The Firth of Forth is such an estuary; and the Forth Bridge is in most respects a successful design for the situation. The monotony of the landscape is here best opposed, and the situation invites a *dominant* design.

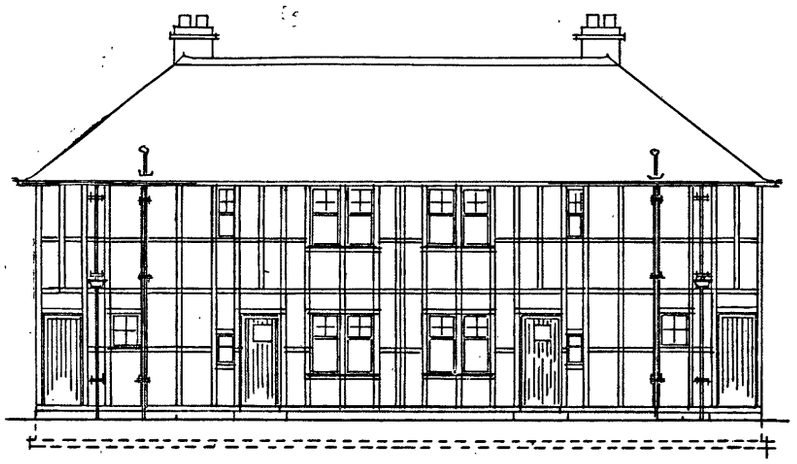
In undulating country, a road bridge and the swinging rise of its approaches may rank in importance with the lesser land swells. Easy ramps and low parapets rising suavely over a thin crown are the most necessary elements of a proper treatment for this situation.

The type of bridge with which we are most familiar is that which links two sections of a town across a river. It is usually built with as few piers as possible, and its arch-lines are either elliptical or segmental. Ammanati's Ponte della Trinita at Florence, circa 1566, a most beautiful bridge of this character, is one of the first in which the new elliptical form was used. The fine cutwaters and curves of the arches and parapets are happily related to their architectural environment. This type and its derivatives are to-day the normal for moderately wide rivers. Many of the Parisian bridges are of this character, and the Pont Alexandre, with its single span of steel, is a development of the same idea.

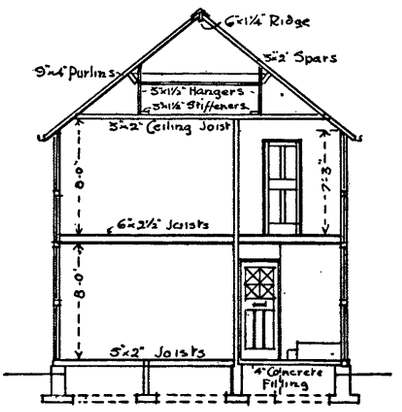
The more intimately bridges are associated with buildings, and especially with buildings of collegiate or civic importance, the more properly may they make use of details common to buildings. Balustrades, for example, seldom look well except in the vicinity of appropriate buildings or the architectural gardening which often forms part of their entourage. The delightful bridge at Clare College, Cambridge, built 1638, is a case in point.

Colour is also an important factor in bridge design, and particularly in the design of modern composite structures. All the older or pre-steel bridges were uniform in colour because built throughout of the same material, but where several materials are employed a comprehensive effect is more difficult, and is often thoughtlessly ignored. In Rennie's Southwark Bridge, for instance, the granite piers were of a whitish grey, and the metal arch-spans nearly black. The new Southwark Bridge has the same apparent lack of cohesion, and as steelwork must always be subject to periodical painting for its preservation, and this detail is usually outside the designer's control once a contract is completed, bridges of this type are liable to lose unity of effect by the injudicious use of inappropriate colour values. It is one of the strongest claims for the superiority in æsthetic quality of ferro-concrete over steel in bridge building that it is not subject to this disability.

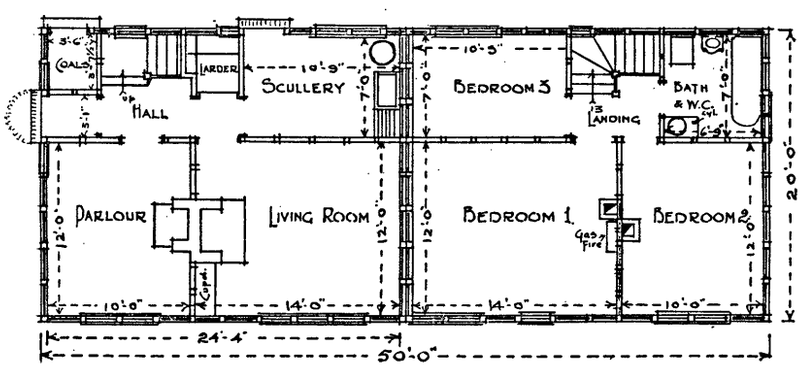
Cheaper Building.



BACK ELEVATION

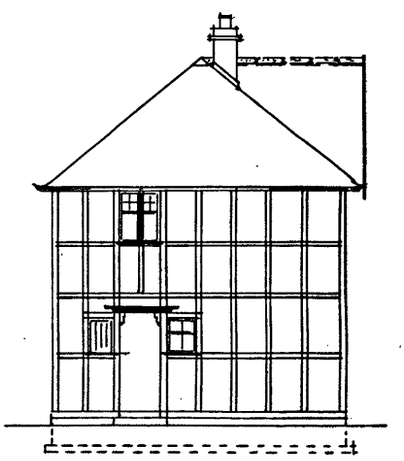


SECTION



GROUND FLOOR PLAN

FIRST FLOOR PLAN



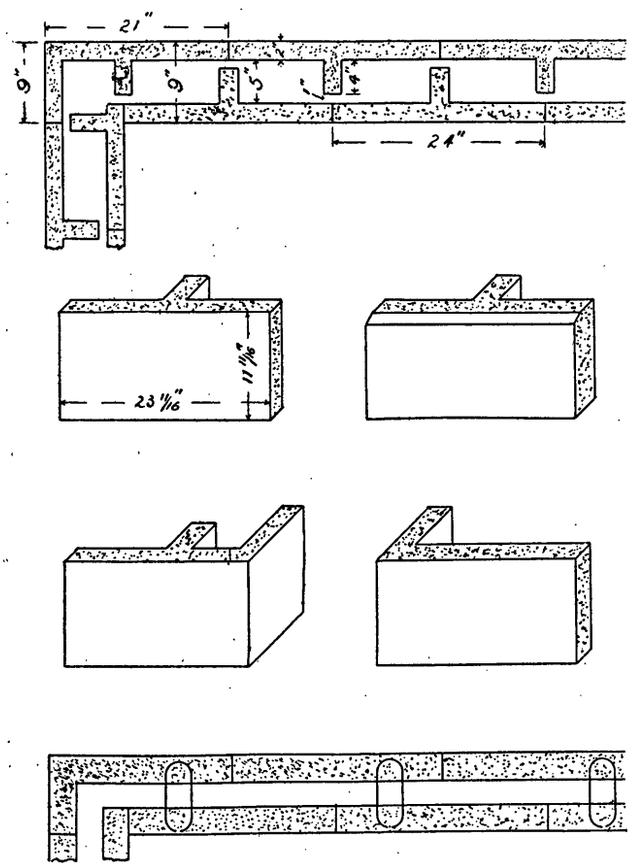
END ELEVATION

SCALE: ⅛ INCH = 1 FOOT.

THE WAKEFIELD METHOD.

The Wakefield Method.

A very interesting method is being adopted at Wakefield with a view to obviate the difficulties caused by the shortage of bricklayers and of bricks. This consists of a framework of oak between which slabs of local stone are used. The stone slabs are backed with a bituminous compound which performs the double function of rendering the stone slab absolutely watertight and forms an adhesive backing for any lining used. Internally the houses can be finished with plaster or plywood, in which case an effect of panelling can be given with oak cover slips. The house we illustrate is built at a contract price of £450, which includes paths, drains, fencing, and electric light; the costs outside this of land, sewers and the formation of roads amount to about £50, or a total of £500, from which may be deducted the Government subsidy of £75, leaving the net cost at £425. This is a system which might with advantage be adopted wherever there is a sufficiency of suitable stone.



THE AUSTRALIA CONCRETE BLOCK SYSTEM.

The Australia Concrete Block System.

The Australia Concrete Block system is one of the simpler methods of block construction. The members consisting of T-shaped blocks, the termination of the end of each T being opposite the centre member of the block on the opposite face of the wall but the two systems of blocks do not quite touch, thus giving a continuous cavity. The bond is given by the middle members of the T, which rest on one another in successive courses not touching the outer faces of the blocks on either side of the wall. Reinforcement can be readily applied, the system being a very elastic one. The machine by which the blocks are made is cleverly constructed and easily worked. The blocks illustrated can all be made in the same machine. One hundred blocks are equivalent to 1,068 bricks and can be made in a quarter of the time.

Shop-fronts and their Treatment.

By A. J. DAVIS, F.R.I.B.A.

The subject I am dealing with to-night is one of considerable interest both to shop owners and their architects.

The commercial and æsthetic developments which have taken place during recent years in the treatment of the shop-front clearly show that after a period of neglect this problem is at last receiving the attention it deserves, and that the merchant is no longer content to leave the decorative treatment of his window to the tender mercies of the contractor and fitter. The modern shop-front is essentially a problem requiring artistic consideration. It is one which appears frequently in most architects' practices, and its many aspects present opportunities where skill and taste can be displayed to the advantage of the client, and to the embellishment of the street in which his premises are situated. It has become more and more recognised that an appropriate shop-front is in itself a commercial asset of no small value, in the same way as the beauty of a picture is enhanced when presented in a well-designed frame.

A great deal has already been written on this matter, but I think it will be of some interest to go over the ground again and discuss the subject from various points of view.

I propose to confine my remarks to the smaller shop, excluding the fronts of large departmental stores, which present special features and are outside the scope of this paper.

History provides us with very limited information regarding the shop of ancient times. In the early days of civilisation commerce was confined principally to the open market-place. As far as we know, the Egyptians, Assyrians, and even the Phœnicians, the great traders of the ancient world, were content to carry on their business in the Agora or market-place of the city.

It seems evident that, apart from the primitive trading booth, the workshop where the craftsman made and sold his wares is probably the earliest type of shop. An idea of its appearance may be gathered from a French restoration of the premises of an ancient Egyptian coppersmith, and it is apparent that from this the bazaar gradually developed, in appearance somewhat similar to those seen in Oriental countries to-day.

In the Græco-Roman towns of Central Italy excavation has revealed the remains of shop premises, giving evidence of their existence as early as the second century B.C. There we find that the outer parts of the houses facing the principal thoroughfares were utilised as shops, the fronts of which were open to the street. The counter, frequently of masonry, was in most cases arranged so that customers could make their purchases, if they wished, without going inside. Large jars were often set in it, to serve as receptacles for the wares and edibles exposed for sale. Sometimes on the side next to the wall there were little steps on which measuring cups and other vessels were placed. At the inner end there was occasionally a depression over which a vessel could be heated. The shop-front was closed with upright, overlapping boards set in small grooves at the top and bottom. Over the shop, about 12 feet above the ground, there was an upper floor or " pergula " along the open front of which was a balustrade, and a separate set of shutters was provided.

In ancient Roman times the shops were built low, and over them small closed rooms were made, frequently accessible from the street by means of a narrow door and stairway. Shops with their upper floors are advertised for rent in the painted inscriptions found at Pompeii, of which the following is an example :—

> To let for the space of five years, from the 15th day of August next to the 15th day of the sixth August thereafter, the Venus Bath, fitted up for the best people, shops, rooms over shops, and second storey apartments in the property owned by Julia Felix, daughter of Spurius Julius.

It is therefore evident that at this early period in Italy shops were already in existence ; but in England, and on the Continent, no information can be ascertained of similar premises until as late as the thirteenth century.

In the history of the Middle Ages frequent reference is made to the open market, the stall and the saint's day fairs ; but shops, as such, were simple covered sheds projecting in front of dwellings, and the few establishments of this nature were confined to the principal streets. As a rule, the merchant used storerooms for warehousing purposes, and the chief opportunity he had for displaying his goods was during the annual fairs, when the bulk of the trade was carried on.

These storerooms were usually half underground, and vaulted with stone. The room on the first floor over the storeroom was called the " solar." This was the chief dwelling room of the family of the merchant, and was approached by an external flight of steps. There are several small well-preserved houses of this type remaining at Kidwelly, in South Wales, and at Winchelsea, near Rye, and a number of cellars at Chester, where the upper part of timber construction has been destroyed by fire.

Possibly the celebrated " Rows " at Chester and Shrewsbury derive their origin from this circumstance. In rebuilding the town after a great fire, it was found more convenient to take a passage out of the solars, and to form a sort of bazaar for shops upon the tops of the vaults, than to use the cellars themselves, which faced a narrow roadway and were otherwise inconvenient.

There was further provision for storage in the roof, used chiefly for corn and other perishable goods, which were hoisted up by means of a crane. On the Continent these storerooms in the roof, with their cranes, are still in common use, notably at Amsterdam, where the absence of cellars has obliged the merchants to provide warehouse accommodation in extensive gables overhanging the canals.

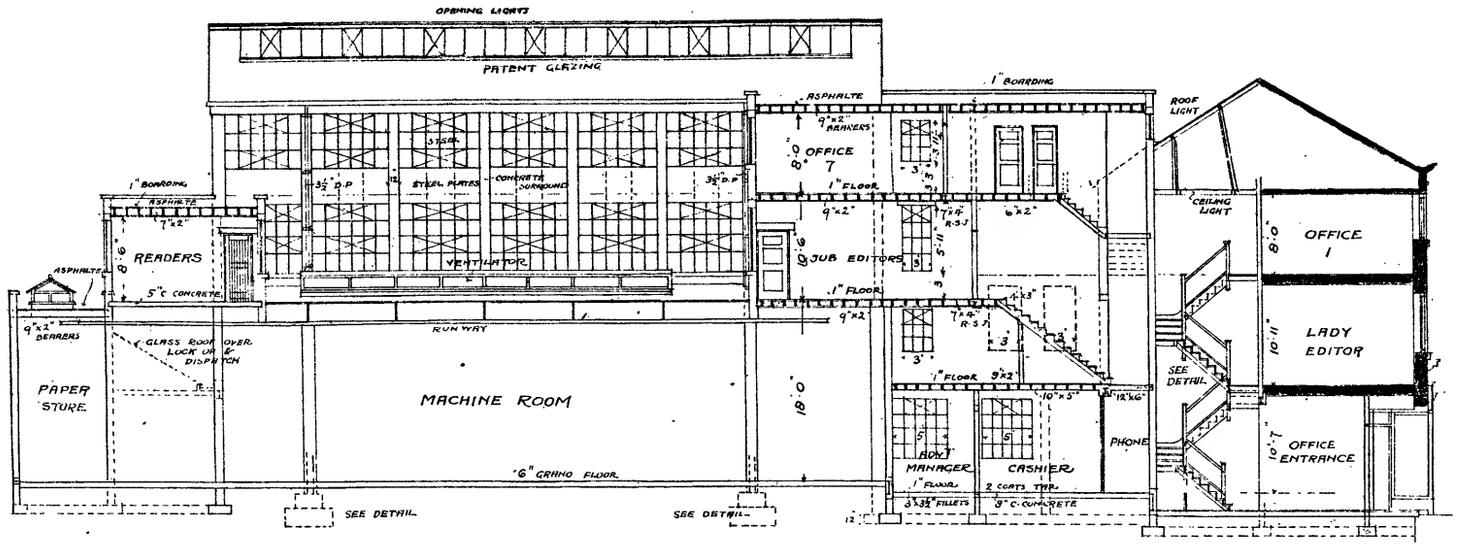
Very limited progress is to be recorded in the thirteenth and fourteenth centuries, but advance may be noted in the early part of the fifteenth century, when we find that shops had their fronts so made that the lower half of the boarding which secured the opening could be let down and supported on legs, forming a platform about 3 feet high on which goods were exposed for sale. The upper part, being hinged at the top, could be lifted up to give protection from rain and sun. A few instances remain of shops of the fifteenth century, the most perfect being that at Butcher Row, Shrewsbury.

Each business was distinguished by a hanging street sign, a few of which are still in common use ; two well-known examples being the barber's pole and basin, and the pawnbroker's three balls, the latter being derived from the shield of the Medici family, whose principal business was money-changing. The bush was the mark of a house of refreshment. In Brittany and other parts of France a small public house is called a " bouchon," and this sign is still common.

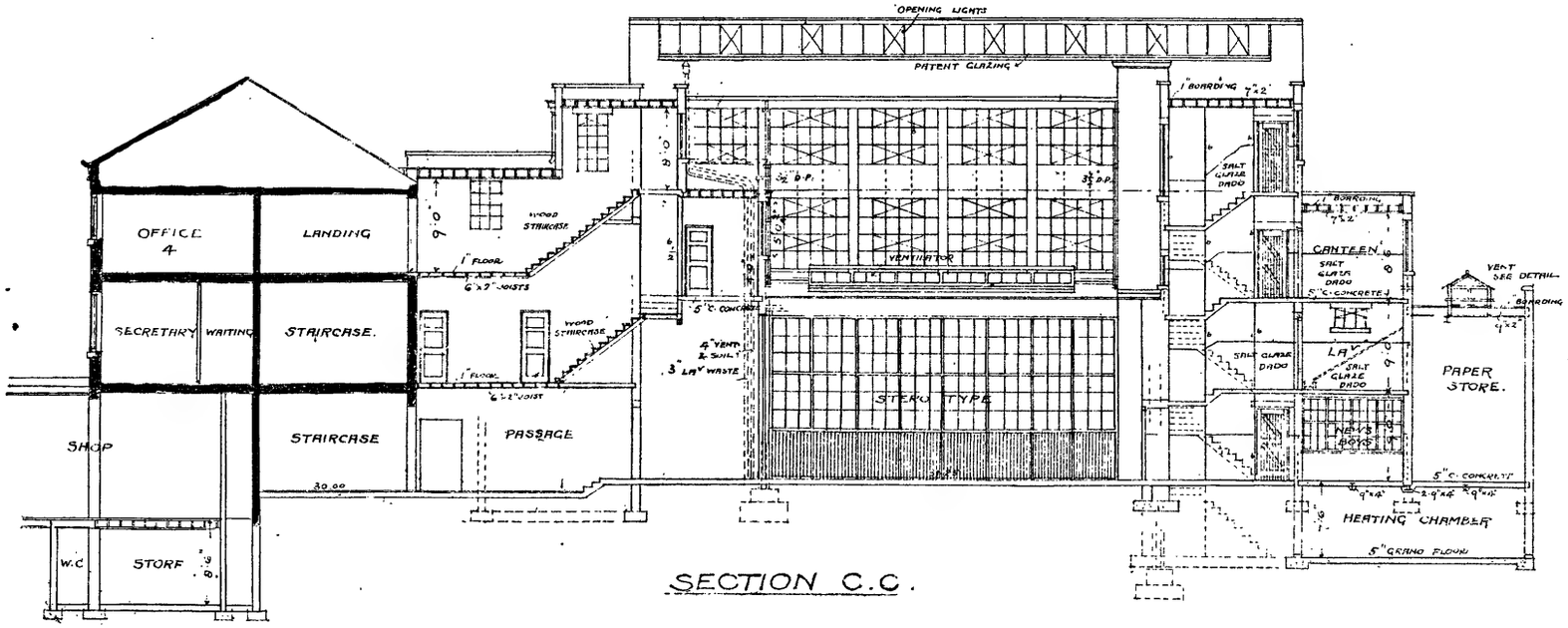
Trades generally had a street or district allocated to them—as, for example, leather sellers in Leather Lane, corn dealers in Cornhill—and every business had its well-known sign. In the fifteenth century on the Continent, according to Viollet-le-Duc, trades were generally concentrated in certain districts. On Saturdays retail commerce was confined to the central markets, and the merchants, having no means of publicity, availed themselves of the town crier's services to advise possible customers of goods they had for sale.

In Paris there flourished a corporation of town criers, whose duties consisted principally of advertising the wares of the business people. The King, " St. Louis," having prohibited the sale of wine in taverns, the town criers became salesmen, and stood in the streets with a pitcher in one hand and goblet in the other, to sell the wine to customers on behalf of the tavern keepers.

In commercial cities in the Middle Ages shopkeepers endeavoured as much as possible to obstruct public circu-



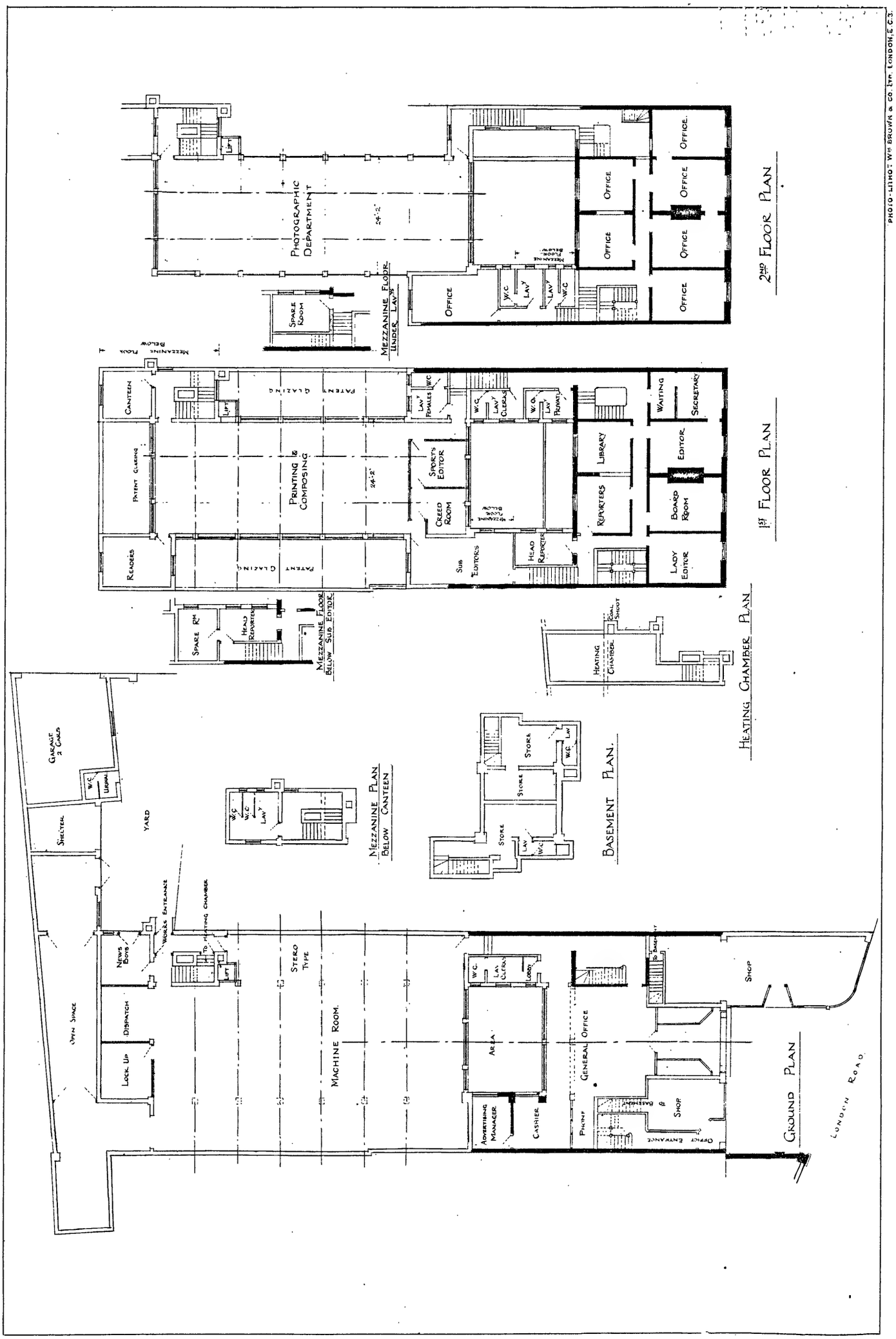
SECTION A.A.



SECTION C.C.

"LEICESTER MAIL" OFFICES, LEICESTER.

STOCKDALE, HARRISON & SONS. ARCHITECTS.



"LEICESTER MAIL" OFFICES, LEICESTER.

STOCKDALE, HARRISON & SONS, ARCHITECTS.

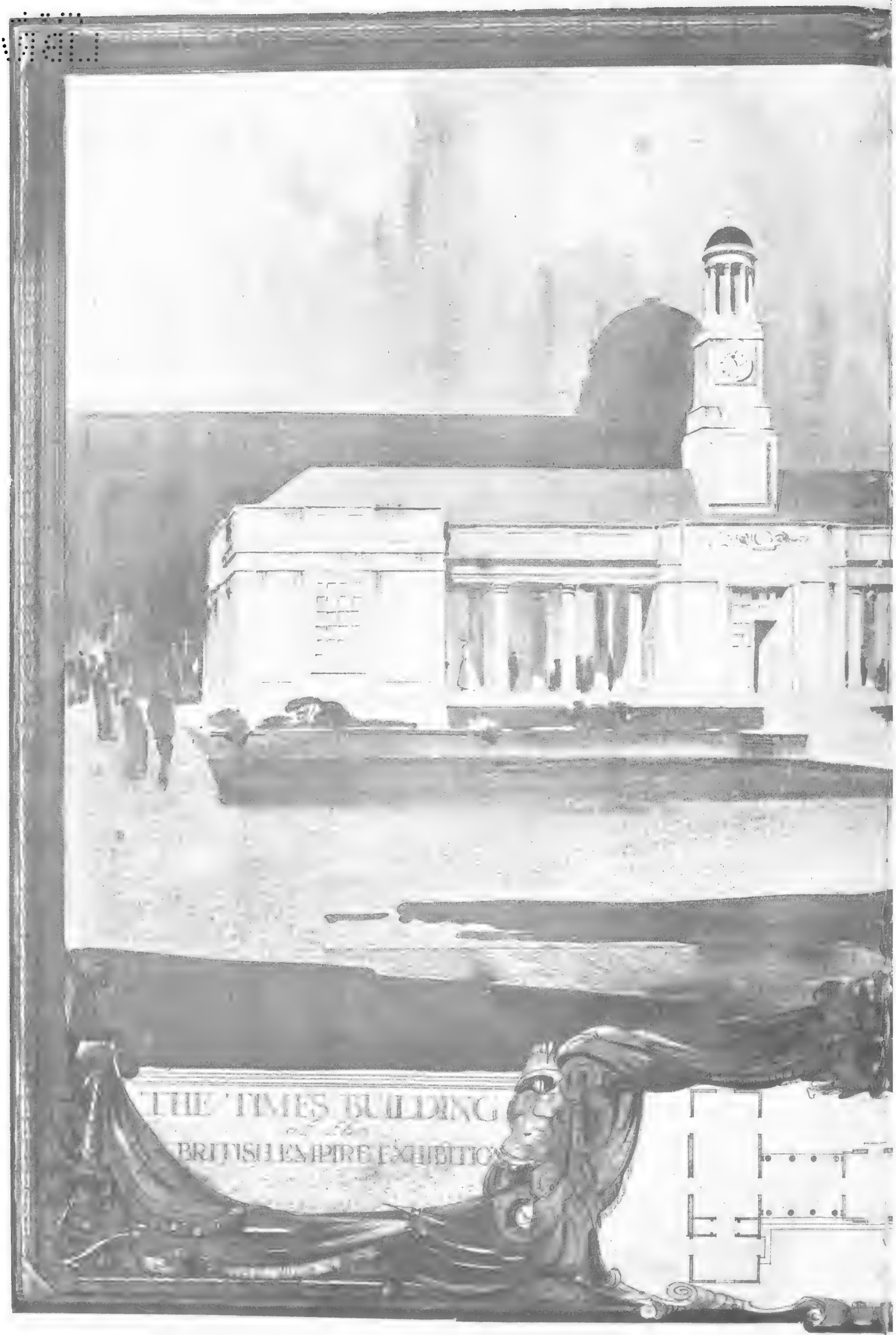
PHOTO-LITHO: WM BROWN & CO. LTD. LONDON, E.C.3.

"LEICESTER MAIL" OFFICES, LEICESTER.

STOCKDALE, HARRISON & SONS, ARCHITECTS.

"INK-PHOTO" WM. BROWN & CO. LTD. LONDON, E.C.3

COLUMBIA UNIVERSITY



"THE TIMES" BUILDING, BRITISH E

"INK-PHOTO" Wm BROWN & CO. LTD. LONDON, E.C.3.

EMPIRE EXHIBITION, WEMBLEY.

"INK-PHOTO." WM BROWN & CO. LTD. LONDON, E.C.3.

ST. PHILIP'S BAPTISTRY, PLAISTOW.

NICHOLAS & DIXON SPAIN, ARCHITECTS.

lation, and by this means to arrest the attention of the passer-by. This practice continued for a considerable time, and only disappeared when city regulations came into force. The streets with open shops and displays encroaching on the roadways had a strong resemblance to Oriental bazaars. During the hours of business all vehicular traffic was debarred from circulating in the narrow thoroughfares, crowded as they were with people and obstructed with goods of all descriptions. At meal hours business was practically suspended and many shops closed. After the curfew and on feast days and Sundays the streets were silent and almost deserted.

Considerable use was made of hanging signs. Many of these were simply a rebus or graphic riddle, which appealed to the curiosity and the sense of humour of possible customers, who, in the majority or cases, were illiterate, and could only appreciate pictorial symbols.

A great number of streets, even in big towns, borrowed their names from celebrated shops, and it is of interest to note that the word shop, originally spelt " shoppe," derived its origin from the French *échoppe*, which means " a stall."

The eighteenth century was a remarkable time so far as the development of shop-fronts was concerned. With the accession of George I the distributive industries of the country seemed to become suddenly imbued with a progressiveness responsible for the erection of a great number of shop-fronts of good architectural character. The introduction and gradual cheapening of glass gave rise to many possibilities in the treatment of the shop-front, and we find much charming originality and freedom of design.

Although the designs of the eighteenth century are considerably varied, yet there are certain marked characteristics common to them all. The windows, for instance, are almost invariably divided into squares by means of moulded glazing bars, these bars becoming lighter in form as time advanced. In fact, in regard to shop-fronts, a reliable guide as to date is the coarseness or delicacy of the woodwork details.

The shop-fronts of the nineteenth century are lighter and more refined than the sturdy and perhaps more architectural examples of the seventeenth and eighteenth centuries. Semi-circular fanlights decorated with radiating and curved glazing bars are commonly seen. Cornices and pilasters are very much alike in the manner of their use, the enrichments being plentifully varied. Most of the fronts of this period are well proportioned, due recognition having been given to the limited uses of material, the latter being usually wood. A classic influence upon the nature of the moulding and details is quite pronounced. Thin pilasters, fluted or panelled, and usually without capitals, are frequently introduced. The stall boards are rather high, panelled in wood, and often additionally protected by some excellent wrought iron or lead work. Bead butt or bead flush doors are greatly in favour, and sliding shutters used in preference to the flap arrangement of previous centuries.

Among many old fronts that are interesting, perhaps none are more suggestive of refinement, and of that perfection of form and detail which are all essentials of a precise architectural effectiveness, than the shop-front of Messrs. Fribourg & Treyer in the north end of the Haymarket. The successful simplicity of the doors and fanlights and the details of the frieze and cornice are delightful. It was originally designed for the business of a tobacco merchant, and is still used as such ; its date is about 1770.

Another interesting shop-front is that of Birch's in Cornhill, one of the oldest existing fronts in the City, and built probably during the reign of George I. The ornament is of considerable merit, and the whole treatment reminds one of the picturesque London of a former age. Another simple Georgian front is that at Boxford, Suffolk, probably of mid-eighteenth century date. Its slender proportions are rather reminiscent of American Colonial work.

A motif of that period particularly admired is the shallow curved bay window. It occurs often, and always to good effect.

In the early nineteenth century we see examples illustrating a further step in the development of shop-front design—the architect adopting a treatment incorporating some classic details in the manner of Sir John Soane. The shop in Artillery Lane is an example showing a clever and original adaptation of classic form and details. The architectural treatment of the two doorways is distinctive.

The examples I have mentioned typify a variety of treatments ranging from extreme simplicity, hardly architectural at all except for their fine proportion and scale, to the more sophisticated design of a shop at Lewes, in which the doorway and flanking windows are separated by a little wall space, but tied together by the use of arches of approximately equal size and of the same decorative pattern, expressing a highly co-ordinated design.

Following this period of intensive development it is perhaps inevitable that a decline should manifest itself. The charming little fronts no longer satisfied the needs of the shop-keeper. The glazing bars were an interruption to the display of his increasingly varied stock. In the rapidly developing industries of Germany and Belgium plate glass was being manufactured in larger sheets and greater quantities to meet a demand becoming every day more insistent, and it is the abuse of this material perhaps more than any other factor that is responsible for the rapid decline in the shop fronts subsequent to the Exhibition of 1851.

That the uninterrupted expanse of plate glass was not without its detractors even in its early days may be gathered from an article published in the " Building News " of April, 1870. Here the author remarks that a shop front must always necessarily prove a very tough architectural subject, so tough indeed that a number of architects are content to leave it alone altogether. An exceedingly common practice is to throw a strong bressumer across the whole front of the building at the height of the first storey, propping it up with one or two thin iron pillars and leaving a gaping chasm below which the shopkeeper may afterwards fill up at his pleasure with any deformity his own want of taste or that of the artisan he employs may dictate.

The upper part of the house, which in ordinary streets comes least into view, will thus often give tokens of having been designed with a knowledge of the rules of architecture, while the lower portion, which is the most prominent feature and is capable of giving completeness to the whole, will consist either of the gaping chasm already mentioned, enclosed but not concealed with plate glass, or of some pattern selected from the catalogue of a manufacturer entirely out of keeping with the elevation of the house front above.

As to plate glass, the shop owner counts the inches with as much eagerness as a farmer does his acres of land and thinks they are productive in much the same manner. His rent is regulated to a very large extent by the length of his frontage, and he naturally thinks it is to his advantage to utilise every possible inch of it for display of his goods. He therefore votes every pier which supports the upper part of the building an obstruction and a nuisance, every pillar must be as thin as possible and be put as far as it can out of sight, and the whole super structure, as far as appearances go, must hang unsupported in mid-air.

We believe the main reason why we have so few artistic shop fronts is to be found in the many contrarieties which have to be reconciled in them. The shopkeeper requires the gaping chasm and his plate glass. He is firmly convinced that the open space serves his purpose best, and when he yields a little on this point he insists on vulgar gilt lettering and as much gaudy ornament as possible to attract customers. Thus our street architecture progresses far too slowly, and where we do not find a dull uniformity we are frequently afflicted with a medley of incongruous and inartistic conceptions worthy only of a nation of shopkeepers. The precise point, in fact, wherein the salesman needs education is that good architecture forms a feature of attractiveness in itself. A shop front composed of nothing but plate glass is like a picture without a frame, and the articles displayed by the tradesman without the accessories of appropriate building decorations lose half their power of attracting customers.

The passion for enormous sheets of plate glass has done more perhaps to prevent the creation of good designs than anything else. The utmost the architect can attempt is the introduction of sash bars in brass, mahogany or some coloured material, and these he is called upon to keep as thin as possible in order that the valuable glass sheets may display their full dimensions. These instructions, while embarrassing to the designer, seem to us entirely unnecessary and useless in a multitude of businesses.

This protest of fifty years ago marks the early stages of a period of retrogression in shop front design, dating from about the time of the 1851 Exhibition, and it must be confessed that to a large extent these remarks have their full significance to-day.

The shop front, as I have endeavoured to show, has a history establishing, in the fully developed types of the eighteenth century, a tradition which still has vitality. The artistic character of these old examples, their charm, variety and fine proportions are all qualities expressing the ideal of the small shop front.

In seeking inspiration it becomes a question as to what extent will the tradition set by these Old English types answer the needs of to-day. It is not a matter of perfunctory copying. The retail shop of the present day is a subject of greater commercial variety, and it must reflect the more complex and specialised nature of the business carried on. We must have a wider variety of ideas to correspond with our many kinds of shops, and we have a further opportunity for diversifying each design in a more abundant choice of materials.

Modern shopkeepers have introduced a practice which opens a new field in design. The custom of recessing the display front so as to provide one or more openings off a corridor or vestibule leading from the pavement into the shop. This arrangement is called "an arcade," and here the buying public may circulate and view a large part of the tradesmen's stock excellently displayed before entering the shop. This treatment attracts the casual passer-by, and it also economises the salesman's efforts. Architecturally it introduces a new conception; instead of a screen across the front we have an intricate series of parts and design changes from two into three dimensions presenting endless possibilities.

With the growth of our centres of population and corresponding increase in property values and rentals, the arcade treatment has become of more and more importance. By adopting this type of plan and providing one or more island show cases, a 20-feet frontage may easily be made to develop a display of 60 feet or more. Although the financial returns are probably not in proportion to this increase, they are related to it to such an extent that the extra cost of installation has proved a sound investment to many merchants.

Apart from the broader considerations of general principles, the needs of the shopkeeper as affecting the design of the show window are many and various, depending on the type of business, the goods to be displayed, the locality, the custom to be invited and the reputation to be established.

It may generally be stated that large, open spaces of window create an effect of cheapness upon the passer-by, which is not always the impression which the particular business wishes to convey. The smaller window, well-proportioned and properly framed, has an air of exclusiveness very necessary to the firm that wishes to please a select clientèle. The perfume shop of Messrs. "Atkinson" in Bond Street provides a notable example of what the architect can do in this respect.

Liberty's new building in Argyle Place is another illustration on a larger scale that a much greater appeal is made by not exposing everything the shop contains, but rather hinting at the contents by a number of separate and uncrowded window compositions is a psychological fact that no one will deny.

On the other hand, the shop for the sale of numerous articles of a cheap nature designed to attract the pennies of the casual pedestrian is a problem requiring a very different solution. It is here that the plate glass front has its merits.

Architecturally there are several principles which may be applied to counteract the effect of undue weight upon the plate glass shop front. An excellent solution is afforded by setting back the window from the general frontage. While admitting the loss of four or five feet of valuable site, the advantages to the business are obvious; the public are tacitly invited to come within the line of the building itself; they are in a position where they have leisure to examine the display without fear of jostling by passing crowds. Messrs. Heal and Sons' store in Tottenham Court Road is one of the few places in which this plan has been adopted.

The use of the deep, flat architrave or frame as a surround enhances enormously the value of the window as a place wherein to expose fine goods. A frame has the advantage of cutting off discordant surroundings, and immediately gives the window dresser that opportunity to compose his wares which is so necessary to accentuate their value and add to their effectiveness.

The distinctive simplicity of Liberty's shop front in the Boulevards des Italiens, Paris, is another interpretation of the same principle. Large plain surfaces of veined marble relieved with a coat of arms, the company's name and a bead ornament in bronze, form an admirable frame for the rich silks displayed within. The architecture does not clash with the wares exhibited, and the flat surface treatment permits a very shallow recessing of the glass, so that the best possible light is admitted.

Where it is desired to treat a shop front as a single unit the full effectiveness will be obtained only when the design is kept small enough to be embraced by the angle of vision at one time. This applies, of course, to frontages of small dimensions.

The use of colour, not only in the exterior surround of the window but also as a background for the goods, is one that should make an increasing appeal to the designer.

With regard to artificial lighting, the general tendency is towards a softly-toned light of sufficient quantity either evenly distributed or concentrated on articles of outstanding interest. Whatever light is required outside the shop should be so treated as to be in keeping with the design. Exterior lighting is falling into disfavour, and the powerful arc lamps of twenty years ago have practically disappeared. All that is really necessary is that the name of the shopkeeper shall be sufficiently apparent, and it is now becoming the custom to place an illuminated hanging sign within the window itself.

In fact, the shop front, in addition to being a show window, is becoming one of the devices of modern salesmanship, and is itself now often used as a means of publicity.

The growing practice of illuminating the display many hours after the premises are closed constitutes an advertisement of fundamental importance. The appearance of the goods displayed is greatly enhanced by cleverly concealed and wellplaced artificial illumination, and many customers are no doubt attracted by this means. Particularly is this the case in regard to shops which specialise in feminine commodities, and in this connection it may be mentioned that light and colour have the same irresistible fascination for women as the candle has for the moth.

Another modern innovation is the use of flood lighting which creates unusual contrasts of light and shade.

In the interests of publicity this is a very effective method of primarily introducing the building itself to the public notice. An example of this can be seen in Mr. Curtis Green's Wolseley Building in Piccadilly and at "Selfridge's," Oxford Street.

While on the subject of publicity it is perhaps worth while to mention the somewhat objectionable scintillating signs which are at the moment enjoying a tremendous popularity, and have even been adopted for the fascia of shop fronts. Perhaps the least offensive of modern electric signs is the "Neon tube," the colour and construction of which will no doubt be modified in time. Mercury Vapour tubes are occasionally to be seen, but they give a curious effect to the complexion, and women who are

aware of this generally contrive to avoid the shops which use them.

The use of effective lettering has recently been acknowledged as a commercial necessity, and as such the value of expert advice is recognised. The well-known incised gilt letters are gradually being replaced by characters of careful design and proportion, properly spaced and harmonising with the general decorative treatment.

An extreme and original example is that at the Banque Populaire in Paris, where a profuse scheme of simple lettering has been adopted.

With regard to the construction of shop fronts, it may be remarked that bent windows are no longer the fashion. Not only are they expensive, but they produce distorted reflections which are very objectionable, especially where concave glass is used.

Much thought has been given to the question of avoiding condensation upon the inside of the shop window. Theoretically the problem is quite easy of solution, for it is only necessary to keep the temperature equal on both sides of the glass. To do this, however, the external air must be allowed to circulate freely, and the difficulty of admitting it evenly, at the same time excluding dust, is one that is not easily overcome. The most effective method yet evolved is to provide a film of hot air on the inside surface of the glass by means of a coil of heating pipes concealed in the window board extending across the whole front and to a depth of about 12 inches. This system has the effect of drying the air locally and is very efficient in preventing condensation.

The level of shop floors should be made about the same as that of the pavement, thus making it easy for prospective customers to enter the merchants' places of business. This may seem to be but a detail, yet it is important, for the buying public, to quite an extent, follow the line of least resistance, so that all steps or obstacles which might deter people from entering should be omitted.

The heights of window-floors should be made to conform to the kind of goods displayed. Furniture should be shown at nearly pavement level, while rings and articles of jewellery should be presented in about the position a person would naturally wear them. In fact, it might be adopted as a maxim that merchandise, to be displayed to the best advantage, must be shown as nearly as possible in the position in which it is intended to be used.

In the limited time at my disposal it is, of course, impossible to enlarge on the few general principles which I have very briefly stated. It is gratifying to note that this interesting branch of civic architecture is receiving the consideration it deserves; and that those engaged in merchandise are alive to the importance of a problem so long neglected.

In conclusion, I will quote Mr. Marshal Field, an American authority on the subject, who says that "Goods well displayed are half sold."

LANCASTER WAR MEMORIAL. Thomas H. Mawson & Sons, Architects.

Book Notes.

"London."

"London," by Sidney Dark, with illustrations by Joseph Pennell. Macmillan & Co., Ltd., St. Martin's Street, London. 25s. net.

This most attractive book consists of 42 reproductions of etchings by Pennell, accompanied with well-written chapters on the various districts illustrated which, taken together, cover "London" as most of us know it. Westminster Abbey, St. James's Palace, Hanover Square, Piccadilly, Trafalgar Square, The Law Courts, Lincoln's Inn, Fetter Lane, the City, British Museum and the East End, Greenwich and Chelsea are all included. Mr. Dark's sketches are admirable, recording in a few well-written sentences the history of districts and their associations with historical characters, while Mr. Pennell's illustrations are treasures of accurate and picturesque impressionism. He conveys in an etching a sense not only of form but actual colour, for his sense of light and shade is so accurate and true that one imagines the colours which produce the light values given.

Whether his etching is fine and delicate, as in the view of St. Mary-le-Strand and the gate of the Temple, or impressionistic, as in "Whitehall Court" and "Sunset, Trafalgar Square," the silhouettes of forms always display an unerring accuracy which renders his etchings living works of art. He can not only see form, but can remind us of what we have noticed ourselves, but need his mastery of form to recall. His work also shows the beauty which is often hidden in the apparently commonplace and gives an idea of the glories revealed to a great artist but too often passed over by us without adequate appreciation.

We know of no book which in so limited a scope gives such a telling and accurate impression of London, and it should be greatly in demand, both by lovers of London and those who appreciate æsthetic masterpieces.

Building Trade Notes.

By H. Bryant Newbold, M.S.A., A.I.Struct.E.

National House Building Committee.

Mr. Chamberlain, in replying to a deputation from the National House Building Committee, whose object was to discover whether or not the Ministry of Health wished the Committee to continue in being, stated that he did not contemplate making any violent changes in the existing legislative provisions. He declared the immediate problem to be the augmentation of supplies of labour and materials; and to this end he agreed that the Committee could make a very valuable contribution.

As the members of the deputation consisted of three representatives of the employers and two of the operatives his reply could not have been more apt, as he put his finger on the very point which the persons he was speaking to had it in their power to settle.

Augmentation of Labour.

Whatever new method or methods of building construction may be decided upon as most suitable and expeditious, no practical result to any Housing Scheme will be achieved until there is a sufficient number of craftsmen and unskilled labour in the building trade. To no one is this better known than to the employers and the operatives. In 1921 the employers proposed a scheme for the introduction of ex-Service men into the industry. On June 29, 1921, the Minister of Labour received a deputation at which it was agreed that every effort should be made by the employers to increase the number of ex-Service men engaged under the scheme. And District Committees were to be set up to deal with their introduction. The result up to July 19 was stated by the Ministry to be that only 124 men had been accepted out of 21,000 who applied. Whether these figures were correct it is a fact that in spite of a very real effort on the part of the employers, no appreciable augmentation from this source resulted at any time; and this was due to the fact that the Trade Union resisted the dilution.

The deputation which visited the Ministry of Health had amongst its members the Trade Union representatives. They expressed their desire to continue to assist the Ministry; and the Minister of Health replied that the immediate problem was the augmentation of labour. Here, then, is again the opportunity to give employment to ex-Service men and at the same time to carry out the expressed wish of helpfulness.

Apprenticeship.

From 1900 to 1906 there was over double the number of skilled mechanics in the building trade that there is now. In 1906 the country was over built so that building operations slackened off. In 1909 legislation practically closed down speculative building; and in 1914 the War finally stopped all building with the exception of that necessitated by the war.

Many men left the industry and very few apprentices were taken on. To remedy this deficit some general scheme of apprenticeship is essential; and as the need is urgent in any scheme that is adopted, the length of the period of training must be shortened. During the war intensive courses of military training condensed two year courses into three months, with the result that soldiers were turned out who were sufficiently trained to be victorious, so that it would not seem at all impossible to effect the same result in peace time operations and in this instance in building.

One of the difficulties that has stood in the way of apprentices being taken on, especially in times of shortage both of work and men has been that employers did not care to train young men who would go away and work for competitors at the completion of their term. What was everybody's business became nobody's business and individual employers excused themselves.

Any intensive scheme would need to embrace a system of grouping all apprentices together under experienced instructors; but it would not be necessary that these groups should be kept continuously with one employer. The organisation of the employers could materially assist by arranging the disposal and transference of the groups. The cost of maintaining the groups and their instruction would be spread over the whole of the federated builders throughout the country.

This or any other system of apprenticeship, of course, implies the good will of the Trade Unions; and this it would appear they have recently guaranteed to the Minister of Health.

The National Housing and Town Planning Council have approved a scheme of apprenticeship in which the functions of the local education authority are co-ordinated with the Building Trades Joint Apprenticeship Committees. The training combines technical training provided by the local Education Committee under the regulations of the Board of Education and practical training by the employers. This scheme in that it takes into account the Joint Apprenticeship Committees is excellent, but in order to meet the present need the devisers of the scheme would be well advised to give their further consideration to intensifying and shortening the period.

Direct Labour.

If, as is reported, a Citizens' Meeting held recently in Birmingham was addressed by one of the members of the deputation which waited on the Ministry of Health recently to offer co-operation with the employers in the work of the National Housing Committee, and if in the course of that address the audience were advised to favour building by direct labour, the matter would seem to admit of some little further explanation. Borough Councils employing direct labour and paying as much as 4d. an hour above the recognised rate will certainly not assist towards the economic house.

Building Trades Parliament.

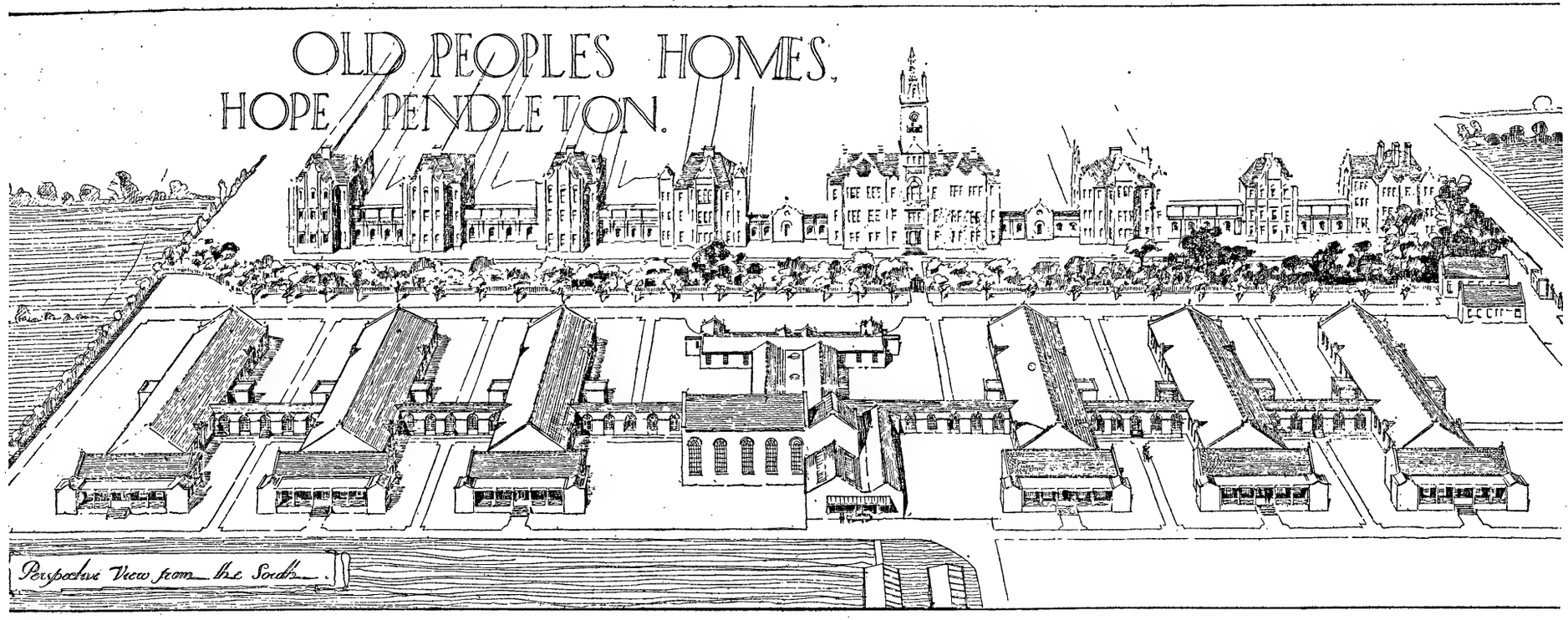
A movement to revive the Building Trades Parliament, or the Industrial Council for the Building Trade as it later became, is making itself felt in some parts of the country. Such a movement cannot be too strongly supported as much of the work undertaken by this body resulted in nothing but good to the whole industry. Should the effort be successful it is to be hoped that the more violent Socialistic element will not bring about its downfall, as was the case before. Further, if the operatives seriously intend to withdraw from the National Wages and Conditions Council some such body will be essential to take its place. It is also to be hoped that the architects will secure representation on any joint board which may be set up to legislate on the affairs of the industry.

"The Architect" Fifty Years Ago.

December 19, 1874.

The New Curriers' Hall.

On Thursday afternoon the foundation-stone of the new Curriers' Hall in London Wall, was laid by the Master of the Company, several of the wardens and members being present. Only a short time ago we gave an illustration and a description of the hall recently built by the Company. Since its erection it has been purchased, together with adjoining land, by Messrs. Rylands & Co., who are about to take it down and build warehouses. A new hall is therefore required, which will have its main frontage to London Wall, whereas the hall about to be taken down is in the rear. The new building, which is Gothic in style, is 30 feet in width, containing four storeys in addition to dormers, and a tower at the west angle carried to a height of about 80 feet. The front will be in Bath stone, with a liberal amount of carving and sculpture, the arms and shields of the Company appearing on several parts of the elevation. The principal entrance has a bold Gothic archway, 10 feet wide, and deeply recessed. The upper portion of all the windows will be filled in with stained glass. The ground-floor contains the offices and committee-rooms of the Company, and on the first-floor is the hall, 44 feet long by 24 feet wide, which is intended to be artistically decorated, and will have a carved oak dado. There will also be a minstrel's gallery at the west end. The upper portions of the building will contain the beadle's residence. Messrs. J. & J. Belcher, of Adelaide Place, are the architects, and Messrs. Braid & Jopling, of Vincent Street, Westminster, the contractors.



SALFORD UNION OLD PEOPLE'S HOMES. CHARLES SWAIN, Architect.

Description of the Scheme.

In 1898 the Guardians purchased some 40 acres of land at Pendleton for the purpose of the erection of new buildings. The time was then not opportune to proceed with an extensive scheme as subsequent events have proved.

ACCOMMODATION AND COST.

The Homes are simple in structure and as economical in cost as is reasonably possible. The total probable outlay amounts to £66,080. The buildings will comprise accommodation for approximately 250 men and 250 women, in addition to necessary administrative adjuncts.

One of the principal features of the new buildings will be the provision of day-room and dormitory accommodation on one level. Considerable advantages, both administrative and financial, will be derivable from (*a*) the means of ready transference of old people to the Infirmary for hospital treatment, and *vice versa* in cases of patients in the Infirmary found suitable for convalescent treatment; (and *b*) the further centralisation of matters made possible as regards the issue of stores, the available means for nursing and staffing as well as of supervision and management, including book-keeping and accounts.

In November, 1922, a selected number of Manchester architects took part in a limited competition and the design submitted by Mr. Charles Swain was placed first in order of merit, and this, allowing for alterations made on suggestions by the architect of the Ministry of Health, is the basis of the scheme of buildings in course of erection.

The contractors are Messrs. Robert Carlyle & Co., Ltd., of Old Trafford, and the contract was entered into on May 23, 1924.

THE GENERAL LAY-OUT.

The general lay-out of the buildings is as under:—

(*a*) Administrative block (in the centre, with easy access from the Infirmary) containing, in addition to kitchen, stores, offices and apartments for the staff, a dining-hall. There will be separate entrances to the hall for each sex. (*b*) Three pavilions for men on the east. (*c*) Three pavilions for women on the west. Each pavilion will contain three large wards on the north, and four small wards on the south of the main corridor.] (*d*) Porter's lodge with receiving wards (for both the Infirmary and the Homes), near the entrance to the site from Stott Lane, Pendleton (east).

Competition News.

The first prize of 30 guineas has been awarded to Cecil A. Sharp, F.R.I.B.A., Westminster Chambers, 11 Victoria Street, S.W.1, in connection with a recent architectural competition for concrete cottage designs organised by G. & T. Earle, Ltd., Wilmington, Hull, manufacturers of lead sealed Pelican Brand Earle's Cement. The second prize of 15 guineas was awarded to Messrs. E. R Hudson & Son, A.R.I.B.A., 69 Warwick Square, S.W.1.

R.I.B.A.

Sir Edwin L. Lutyens, R.A., Vice-President of the Royal Institute of British Architects, has just been informed that he has been awarded the Gold Medal of the American Institute of Architects, and he has been invited to attend the Architectural Convention in New York in April, 1925, to receive the Medal in person.

This is the first occasion for 17 years that the Gold Medal of the American Institute has been awarded to a British architect; the last occasion being in 1907 when it was awarded to Sir Aston Webb.

The Johnson Service at St. Clement Danes.

On Saturday, December 13, being the 140th anniversary of Dr. Johnson's death, a fine and touching service was held at his own church, St. Clement Danes. It was a strange sight—a strange witness to the eternal power of literature—that the church should have been crowded with men and women of all ranks and types, drawn thither by the compelling bond of interest in the most living figure in all history. But interest is too poor a word: it was personal love for that grotesque and noble presence which brought together those who joined in that unique and splendid service. At no other, surely, have the prayers been written by the man in whose memory that service was held; and the choice of the lesson—Job xxviii, read by the Scribe of the Johnson Club, was not less happy: "Where shall wisdom he found?" Johnson, the man whose spoken words have made him immortal, was, as his prayers and meditations prove, in his own estimation the man who needed pardon and direction; as Mr. J. C. Squire in his address most truly said, he was a great Christian. And his next point was new and not less forcible. We hear people talk of "poor Lamb," "poor Coleridge," and however we may regret it, there is in the phrase a touch of truth. But no one ever talks of "poor Sam Johnson"; yet his school failed, he came to London penniless; his Oxford shoes had holes in them. But no one dared to patronize the Doctor, in his own lifetime or since; and if his dignity commands admiration, his nature wins our love, as it won, long ago, that of his friends and his dependents.

The great wreath which hung during the service conspicuous in his church, was borne after it to the foot of his statue, men and women standing around in crowds to see the act of homage, and to feel, as perhaps never before, the force and greatness of his character and of that humility which led the greatest scholar of his day to pray in the words of his own prayers, used in his own church that afternoon, for help and guidance in our studies as in our lives on earth.

We have been asked to announce that Messrs. Thomas Marshall & Son, tank, cistern and cylinder manufacturers, of Armley Road, Leeds, have been compelled, owing to the increased demand for their goods, to take over additional works, which they do from January 1, 1925. The addition covers practically three times the floor space which they have at the present at their disposal, and also carries a railway siding right into the works. It is their intention at a very early period to manufacture additional lines, and with a view to increased output they are installing a still larger galvanizing bath than the one fixed in December, 1923.

The Department of Messrs. Foyle's bookshops devoted to Books on the Fine and Applied Arts has been reorganised, and the stock is being considerably augmented, particularly in the sections for works on Ornamental Ironwork, Textile Designs, China, Furniture, Decoration and Posters. Arrangements are also in progress to import books from all parts of the Continent and the United States.

General News.

BEDFORD.—A new telephone exchange is to be erected in Lime Street.

HACKNEY.—The Borough Council propose the purchase of a site at Stamford Hill for £1,800 for the purposes of an electricity substation.—Plans passed: building on the site of Nos. 372 and 374 Mare Street, for Mr. S. Clough, workshop, Rectory Road, for Mr. D. Stevens; factory, Downs Road, for Messrs. A. J. King, Ltd.; 3 shops and houses on site of 20 Morning Lane, for Mr. W. Abbott; workshop, Wells Street, for Mr. S. Harris.

LEWISHAM.—Messrs. Horace Cheston & Son have prepared a scheme for the development of the Clythe Hall fields on the Crofton Park estate.—Plans passed: 16 houses, new road off Burnt Ash Hill, for Messrs. Eaglen Bros.; 6 houses, De Frene Road, for Mr. L. M. Amy; 6 houses, Kemble Road, for Mr. F. Clode; 9 houses, Bellingham Road, for Mr. H. Watt.

LOWESTOFT.—Four houses are to be erected on the Beccles site at a cost of £1,765.—Plans passed: new wing, St. Mary's Convent, for Rev. Mother Provincial.

PAIGNTON.—It has been decided to erect 32 houses on the Preston site.

SOUTH SHIELDS.—Parliamentary powers are to be sought for the construction of the North & South Shields Railway, but the Bill may not be proceeded with in the ensuing session of Parliament.

SWANSEA.—It has been decided to erect 150 houses by direct labour and 250 by contract.—The Rotherslade Bay Improvement scheme is to be proceeded with at a cost of £15,000. It provides for a promenade.—Buildings for mining instruction are to be erected at a cost of about £30,000.—Revised plans are to be prepared for the municipal secondary schools for boys and girls.—Plans have been prepared for an elementary school for 520 children at Llansamlet.—Sketch plans have been prepared for enlarging the Cwmrhydceirw school by 240 places.—The Glais school is to be improved at a cost of £950.—Revised plans have been sanctioned by the Board of Education for a school for 480 at Cwm.—A bridge is to be erected across King's Dock level crossing.—Cockett Road is to be diverted at a cost of £21,320.—An underground convenience is to be constructed in Gwydr Square.—Plans passed: factory, South Dock, for Mr. W. Jones; 4 houses, Budehaven Terrace, for Mr. F. E. A. Beer; gymnasium, Clydach Road, for Messrs. John Player & Sons, Ltd.; 4 houses, Waunwen Road, for Mr. J. O. Watkins; 4 houses, Compass Street, for Mr. A. E. Wright.

Trade Notes.

In our issue dated December 12 we published an article on Plywood by A. Mora. When acknowledging the loan of photographs which illustrated the article we should have printed The Plywood Importing Co., Ltd., instead of as stated.

Forthcoming Books.

"The History and Development of Costume," by Rosenberg, is announced for publication in January, 1925, by the Art Department of Messrs. Foyle's bookshops. This book will be an exhaustive treatise dealing with costume from prehistoric times to the nineteenth century, and will be illustrated by 200 coloured plates. Messrs. Foyle also announce "Coptic and Islamic Stuffs," by Kuhnel & Vollbach, for the early spring.

It is claimed that for the colour reproductions a most expensive process is being used, and that the results will be of unrivalled excellence.

A limited edition only of each work will be issued.

Christmas Presents.

The General Electric Co., of Magnet House, Kingsway, London, W.C.2, write us on the subject of Christmas presents, pointing out that they have paid particular attention to such requirements by preparing numerous small electric gifts which are both seasonable and useful. For instance, the Motorists' Spare Lamp Case, made to contain a full set of Osram automobile lamps, the G.E.C. electric handlamp or a Handelite inexhaustible pocket electric flash lamp, Magnet electric iron, the Perfuma smoke absorber for use in the smoking room, all under 20s. Others from 20s. to 40s. include Magnet electric shaving pot, Magnet electric toaster, kettle, pedestal heater, and a travelling universal voltage electrical outfit containing iron, cord adaptor, and n.p. stand, water boiler and curling iron heater, all complete in neat case, this latter a very useful present for a lady, as the whole outfit can be used on any electric fitting, and obviates the carrying of spirit lamp and spirit, often with the possibility of damage to contents of travelling trunk; this latter may be obtained at the low price of 30s. Ask your local electrical dealer or your stores for "Magnet" electrical Christmas gifts, and ensure obtaining the right goods.

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The Shop Front.

The question of the right method of treatment for shops and shop fronts may be regarded either as being unsolved from an architect's point of view or it may even be relegated to the more hopeless category of matters on which architects will be allowed no authority. If the end to be aimed at is to get the last possible foot of clear glass architects would have to make the best of what would, after all, be a bad job, but we hope that this is not so. Some years ago people were in the habit of crowding their drawing rooms with a collection of useless ornaments, impossible seats, pots of ferns, screens, and china monstrosities, but the majority now recognise that these things do not make a pleasant or comfortable room and no longer display a desire to collect immense masses of nearly useless *bric à brac*. May we not take heart from this and hope that the shopkeeper will recognise that it is unnecessary to crowd samples of everything he has to sell in his shop windows, but rather to show a selection of his best goods to most advantage, which chiefly depends on the setting in which they are placed? And just as a good picture may be utterly spoiled by a bad frame, so may the shopkeeper's goods appear unattractive if they are not well displayed. Again, how many shops do we pass which give us the impression that everything they have is crowded into a shop window and if that everything does not include what is wanted there is no inclination to go inside and inquire. A shop window should, *de facto*, be like a spider's web—an invitation to go further, rather than the end of an enquiry; and just as we are advised not to wear our hearts upon our sleeves so the trader should not at once display all he has to offer.

If this, which is a reasoned argument from the shopkeeper's point of view, be once conceded, our difficulties will begin to disappear. We shall not, it is true, want to replace the shop of two centuries ago by an exact replica, for the shop of the past was in many cases a makeshift—a slightly enlarged opening in a wall in which goods were shown—but we may reasonably take the shop front of Empire and Directoire date in France and the corresponding periods here, when the whole ground floor of a building was devoted to the purpose of a shop and we have large sheets of glass framed between delicate sashbars and finely designed doors with good fanlights over them, and in which a simple and pleasing entablature is carried on pilasters or columns. These would serve every purpose of to-day's commerce as they served our forefathers in the past, and the shopkeeper should bear in mind that the design of a shop front will attract attention long before the goods displayed in it become clearly visible. We do not know whether the islands of detached showcases and corridors of glass into which the approaches of many modern shops are formed are really of much value from the commercial standpoint, but if they are there is no reason why they should not be well designed and pleasantly sub-divided. The majority of the public no longer demand dead sheets of plate glass in their windows but are satisfied with a reasonable amount of sub-division, and the modern shop front remains the last rampart of Philistinism, but one which, we trust, is bound to fall.

As to the extent of glass frontage, the road to reform is more difficult unless indeed public authorities and municipalities choose to restrict the private right to make our streets hideous. They could call for a certain ratio of solid supports, a ratio not to be minimised by affixing mirrors or other contrivances to solid masonry. Laws dealing with displayed advertisements are also urgently required, and this and the compulsory provision of æsthetically adequate supports for the superstructure are badly wanted. And we are entirely in agreement with Mr. Trystan Edwards in holding that the inclusion of several storeys in what is apparently an enormous shop front serves no useful purpose and deprives our buildings of scale. No one except the passenger on a motor bus can see what is displayed in a first or second floor window and there is no reason why in these the fenestration followed should not be that of the upper and not the lower portion of the building. If we want to make the fullest use of shopping districts we shall do it in another manner by terraces along the first or even the second floor levels, reached by public moving stairways. We shall also bridge over the narrower side streets so that our shopping terraces will be continuous; and last, but not least, the frontages of shops will form continuous arches or colonnades. But all this and other improvements which might be mentioned, will hardly come about until the public, recognising that traffic problems and shopping facilities are closely dependent on one another and need, in the public interests, to be controlled. This is not, as some would have it, an invasion of private rights but a recognition that if we, wish to live and do business in crowded centres we must arrange for the new requirements brought into being. Our theatres and places of amusement are private ventures, but nevertheless they have to conform to enactments laid down in the interests of public safety and convenience. It is—in a smaller measure—equally true that public convenience and traffic requirements should be safeguarded wherever a shopping district attracts great crowds of people. What we advocate could be brought about without injury to the value of property and without adding to the expenditure of private owners, and unless this century is to witness an absolute deadlock our administrators will have to take action. The problems created by concentration of population in great centres are too great to be solved by any system of *laissez faire* and it is quite impossible to expect private owners to deal with them by piecemeal measures.

We believe that the greatest bulwark against Socialism that can be devised is dependent on the recognition of the public right to control where control is necessary in order that everyone should be secured in his own possessions, but no one should have the opportunity of inconveniencing the community by ill-judged action. And the problem of the treatment of shops and shopping districts is one in which public interests are, and should be, the first point to be thought of.

Our Illustrations.

HOUSE AT GREENHILLS ROAD, CHARLTON KINGS. HENRY E. FARMER, Architect.

HOUSE, No. 7 AT GREENHILLS ROAD, CHARLTON KINGS. HENRY E. FARMER. Architect.

HOUSE, No. 5 AT GREENHILLS ROAD, CHARLTON KINGS. HENRY E. FARMER, Architect.

Notes and Comments.

"Decent Homes for Decent People."

Under the flaming title quoted the "Daily Express" has published an unmeasured denunciation of housing conditions in which it urges the Government and public authorities to put an end to all our evils and give the people the decent homes they want. The same organ would probably, if its advice were followed, be equally ready to give us an eloquent article on "the Scandal of High Rates." We are a little tired of the continual harping on the woes of the poor, which are partially at any rate self-caused. If a man with six children and an uncertain income of two pounds a week has lived for twenty years in one or two rooms and is in arrear of his rent, should we not be justified in saying that part of his troubles are the outcome of having a larger family than his means justify, and does not the fact that his wages have remained at two pounds a week for years, perhaps, show that he is not very capable? The so-called middle classes are expected to cut their coat according to the cloth they have at their disposal and if they do not they have to take the consequences. There would be less misery and less destitution in this country if every class were taught that they had to bear their own burdens and work out their own salvation, and the housing shortage would be in process of solution had it not been for the fact that the working classes have relied on an amount of help which cannot be given them.

The Devonshire House Site.

Messrs. Holland and Hannens and Cubitts, Ltd., think that as they are proposing to give up land for the new street connecting Stratton Street and Berkeley Street, the Westminster Council should undertake the cost of making the street and sewering it.

This the Council can do in conjunction with the L.C.C., but they are replying that they have no powers to deal with the proposal. Nor can they approve of a proposal for a new give and take line which involve a projection of some 9 in. beyond the building line along the Piccadilly front. It would therefore appear that the promoters of the new proposals are not exempt from the very great difficulties often experienced by those who wish to effect changes in the stereotyped boundaries of properties in London.

The Operative Builder.

We have before us a number of the paper called "The Operative" in open type, "Builder" in heavy type, which we suppose must be accepted as a compliment to our contemporary. Evidently the proprietors place more stress on the last word than the one which precedes it. Is this because the "operative" sometimes will not "operate"? The contents shows us that the publication is more a political one than connected with building. It is evidently very much annoyed that the Weir type of house has found favour with the Government and proceeds to belittle it. We do not much like the idea of these steel houses, but their introduction seems to be a direct result of the enormous difficulty of obtaining reasonable prices for housing with ordinary materials and believe that had all classes pulled together after the war we should never have heard of such proposals. As it is, it seems quite probable that their adoption may save anything up to £150 for each house and there appears to be no use in fighting against what certain events have made inevitable.

The Architectural Association Play.

The A.A. play this year is a departure from what has been the usual tenour of former productions because it does not contain the same proportion of technical quips and oddities. It is far more like an ordinary farcical revue with a flavour of architectural suggestion. Bulbus and his wall is followed by a scene representing the architectural student at five years' interval, the last presenting an unoccupied classroom! The "Mistress Art" and "Popular Architecture" were followed by a very amusing and picturesque operetta entitled "The Innkeeper's Daughter."

The second part consisted of "The A.A. Blues," "The Belle of Balham," "Charlie's Wife," "Treasure" and the "British Museum" and "A.A. in 1950." The acting was throughout excellent and Mr. F. Halleburton Smith who appeared in a majority of the scenes won laurels by his skill in mimicry and his most amusing enunciation. Mr. I. B. Jeffcott as the A.A. Secretary in "The Mistress Art" was an enormous success, his parody of Mr. Yerbury exciting great amusement, while the ladies, especially Miss Frances Buckland, Miss Prudence Bateson and Miss Enid Caldicott, amply justified the wisdom of the Association in enlisting women among its members. Both music and scenery were excellent and the new R.I.B.A. meeting room made a good theatre, the stage being cleverly disposed across an angle of the room.

The American Gold Medal.

We are glad to be able to congratulate Sir Edwin Lutyens on the decision of the American Institute of Architects to honour him by the bestowal of their gold medal. We have no doubt that he will tell them some amusing things, both about architects here and in America and himself, and hope that on this occasion he will overcome his well known reluctance to make a speech. He can speak well and very amusingly in private life and we are sure that his American *confrères* would like an opportunity of gaining a closer knowledge of a personality which we, with our ampler opportunities, find delight in. If he should bring back with him both the gold medal and the cancellation of the American debt we could promise him an exceedingly warm greeting and should have a fine object lesson in what an architect may achieve for the public.

The Cost of the Wheatley Scheme.

We do not think many houses will be erected under the Wheatley Scheme if the procedure followed by the Crayford Urban District Council is widely followed. The Council is advertising for applications for houses at the following weekly rentals: A3 houses, 19s. 3d.; A1, 20s.; B2, 21s. 9d.; B1, 22s. 6d. a week. Unless applications are made for the houses by those willing to pay the above rentals, which are based on the lowest prices received for the houses, they will not be built. If this procedure had been followed in other cases, money would have been saved and the true position of matters would have been realised. The usual procedure has been to build the houses to find that adequate rents could not be obtained, and either to reduce the rents at the cost of tax, and ratepayers or sell the houses at a loss to a class of people who they were never intended for. All of which points out to getting back to private enterprise in the shortest possible period of time.

THE NEW DEVONSHIRE HOUSE. By THOMAS HASTINGS & PROFESSOR REILLY, Joint Architects.

The above illustration shows Berkeley Street very much widened. In the distance the elevations of Messrs. Thos. Cook & Son's new premises and Devonshire Court are to be seen.

Devonshire House, Mayfair.

We are now able to make an authoritative statement with regard to the new buildings which are to occupy the site of the well-known house and gardens of the Duke of Devonshire in Piccadilly. So many proposals for dealing with this, the most valuable of all West End properties, have been marked and discussed in the Press, that it is interesting to be able to say definitely, now that pulling down of the old buildings has actually started, what is really going to take their place. It is a fine building, which will include the most beautifully appointed "apartment" flats in London, with shops and a wonderful restaurant underneath. The new building will begin to arise immediately the land is cleared and will proceed with more than American speed. The new block will face Piccadilly and the Green Park on its main front, a widened Berkeley Street and Stratton Street on its two flanks and a wide new street connecting them at the rear.

Immediately opposite the north frontage and with a long frontage to Berkeley Street will come the future headquarters home of the great business of Messrs. Thos. Cook & Son. The migration of this world-famous firm from Ludgate Circus to the Devonshire House site is another striking instance of the gradual western movement so noticeable in almost all cities. Messrs. Cook's building, designed by Mr. Arnold Mitchell, architect, will be flanked by a second new street running from the end of Stratton Street to Berkeley Street. Between this new street and Lansdowne Passage, Messrs. Edcaster, Ltd., are now starting on the erection of another great block of flats and shops, designed by Mr. W. Henry White, architect.

The magnitude and importance of these developments will be apparent from the fact that within the next two years it is estimated that over two and a half to three million pounds will be expended on the Devonshire House site.

It is interesting to note in connection with these undertakings that the Westminster City Council are immediately starting practically to double the width of Berkeley Street. This will not only help to solve the traffic problem in this congested area, but at the same time convert the present insignificant street into a handsome and important thoroughfare.

Almost immediately after the present Duke had sold his famous town house the price of building rose to such a prodigious height that for some time it was practically impossible to formulate any scheme which would show an adequate return on the capital involved, and this prevented many an attractive proposition from materialising, but now that building costs are more normal and reasonable it has been decided to start on the erection of buildings in every way worthy of the position.

The designs for the block fronting on Piccadilly have been placed in the hands of Mr. Thomas Hastings of New York, and Professor Reilly of Liverpool. The former, who is perhaps the leading architect of America, is a Gold Medallist of the Royal Institute of British Architects. The owners of the site, Messrs. Holland & Hannen & Cubitts, Ltd., will of course be the contractors. It will be remembered they were responsible for the super-structure of the New County Hall at Westminster Bridge, the large Cunard building in Liverpool, and many other of the principal buildings of England. The combination of these two architects and such contractors should be a sufficient guarantee of the excellence, both artistically and structurally, of the new edifice.

The disposal of the flats will be in the hands of Messrs. Knight, Frank & Rutley of London, and of Douglas L. Elliman, Inc., of New York. That the leading firms of agents on either side of the Atlantic should be so employed is a guarantee both of the type of tenants sought and that their requirements will be fully and admirably met.

Those who are familiar with New York will know with what fine architectural effect Americans have developed what they term "the apartment house." Flats of all sizes will be embodied in the scheme, but whether large or small they will be fitted with every convenience and luxury comprised in the very latest American practice with its lavish supply of bathrooms and wardrobe accommodation, supplemented by such devices for comfort as "panel heating," etc., in which the English are ahead of all rivals. The pile will depend largely for its architectural effect on the grandour of its mass, and external decoration will be reduced to a minimum in conformity with modern taste.

"Devonshire Court," Mayfair.

On the Northern portion of the Devonshire House Estate and adjoining Lansdowne House Gardens a fine block of residential flats is to be erected.

This portion of the Devonshire House site faces on the south the 50 feet roadway which is being formed to connect Berkeley Street with Stratton Street and will be an extension of the latter.

The Eastern frontage of the site is to Berkeley Street, shortly to be widened to 55 feet and will form a broad thoroughfare from Berkeley Square to Piccadilly, which in addition to relieving the congested traffic in this at present narrow street, will greatly improve the value of the property in the street and add to its amenities, and it is fully expected this widened thoroughfare with the fine blocks of buildings we are now promised will rival Bond Street.

The block of buildings to be known as "Devonshire Court" will be erected by Messrs. Edcaster, Ltd., London, W.12, from the designs of the Architect, Mr. W. Henry White, of No. 14A Cavendish Place, W.1, and operations have already been commenced upon the site. The block will contain:—47 flats with 5 bedrooms, 2 sitting rooms, hall, 2 bathrooms, 4 w.c.'s, kitchen and butler's pantry; 5 flats with 4 bedrooms, 2 sitting rooms, hall, 2 bathrooms, 4 w.c.'s, kitchen and butler's pantry; 20 shops with basements; restaurant—a large building under the court with balcony, which comprises about 19,000 square feet of floor area.

The flats have been designed to contain within a given area the maximum amount of accommodation with a minimum waste of space and so arranged that the service question should be largely solved owing to the ease with which each flat can be worked.

Although each flat will be self-contained—in these days important to many people—the advantages of an hotel is also available, as provision is being made on the lower ground floor for a first-class restaurant with opportunities for music and dancing, and there will be access to the restaurant from each of the entrance halls to the flats in addition to the main entrance to the restaurant in Berkeley Street. The intention is to fit up the flats with the most up-to-date schemes for electric lighting, heating and cooking, and improved sanitary fittings, etc., and each bedroom will have its own fitted lavatory. These flats have been specially and deliberately designed to enable them to be let at moderate rentals for the accommodation they contain and the unique position they will occupy, and it is confidently believed they will be in great demand as soon as it is known that they are available, and the first portion of the block should be so before the end of 1925.

AYLESBURY.—The Bucks County Council have decided to build an elementary school for 120 infants at the Southcourt housing estate.—The Town Council have asked the surveyor to prepare plans for a public abattoir.

BARNES.—The Urban District Council are to erect a further 26 houses, to be sold at £550 each.—Plans passed: 6 houses, Gerard Road, for Messrs. E. Broughton; 4 houses, Parkfield Avenue, for Mr. A. J. Carter; 6 houses, Westmoreland Road, for Mr. R. B. Powell.

BARNSLEY.—The borough surveyor has prepared plans for public lavatories in Eldon Street and Peel Square.—The Corporation are to erect 30 houses at Carlton Lane, 90 at Ardsley, and 48 at Barnsley Road. Plans passed: 4 houses, Locke Avenue, for Mr. S. Taylor; extensions Barnsley Grammar School, for Governors.

BARNT GREEN.—The Board of Education have agreed to the provision of a new Church of England School.

BURNAGE.—The parishioners of St. Margaret's Parish Church propose making an extension to their church estimated to cost £3,500. Plans are being prepared by Messrs Austin & Paley, the architects, of Lancaster.

CAKEMORE.—Worcester County Council have decided to provide an elementary school for 600 children on a site in Long Lane.

DORCHESTER.—The Corporation have purchased two pieces of land in connection with the erection of houses on the Victoria Park housing site.—Buildings on the bowling green are to be reconstructed.

DOUGLAS (I.O.M.).—The Town Council have asked Mr. J. E. Teare, the architect, to get tenders for the erection of 40 houses in lots of two or more.—The borough surveyor is to prepare plans for an entrance to the Promenade Gardens from the Harris Promenade.—Plans passed: 4 houses, Westmoreland Terrace; extensions Noble's Hospital, for trustees; store; Spring Gardens, for I.O.M. Dairies, Ltd.

GLASGOW.—The Corporation are considering the provision of washhouses in North Kelvin Ward.

GRAVESEND.—Plans passed by Town Council: 11 houses, Old East Road, for Messrs. Hopkins & Sons, Estate Road, near Sun Lane, for Messrs. Bridgland & Clay; extensions St. Mary's Church Hall, Dashwood Road, for Church Council.

HARROGATE.—Extensions are now being carried out at the Royal Bath Hospital. Plans prepared by Messrs. Gibson & Hill, architects, Prospect Hill, Harrogate. The improvements are estimated to cost £12,000.

MANCHESTER.—Messrs. Williams Deacon's Bank, Ltd., are proposing extension to their branch at Ardwick Green, by incorporating the adjoining premises. Plans have been prepared by Mr. W. Cecil Jackson, architect, Chesterfield. The building contract has been placed with Messrs. H. Matthews & Son, Ltd., 129 Stockport Road, Manchester.—The board of management of the Xavarian College, Victoria Park, propose the erection of additional wing to their existing premises, consisting of a Memorial Chapel and four class rooms, laboratory, &c. Sketch plans have been prepared by Messrs. Foden, Hemm & Williams, architects and surveyors, 199 Deansgate, Manchester.—Messrs. Ollier and others have secured a site in Cannon Street for the erection of a modern office block of fireproof construction. Plans by Mr. C. Swain, architect and surveyor, 12 Exchange Street, Manchester. Contract placed with Messrs. J. Gerrard & Sons, Ltd., builders, Swinton.

OLDBURY.—Final plans for new Secondary School buildings have been submitted to the Board of Education for approval.

STOURBRIDGE.—Two additional class-rooms and an extension of the science buildings are to be provided at the King Edward Grammar School.

WARWICK.—The Corporation are to erect another 32 houses.

The "Isle of Purbeck."

By H. A. J. Lamb, A.R.I.B.A.

CORFE VILLAGE.

In all probability not a few would have to pause and think for a few moments, to be able to say definitely the position of the so-called "Isle of Purbeck," which in reality is a peninsula, about twelve miles by ten, situated in Dorset and lying immediately to the south of Poole Harbour. In the past it was covered by a forest extending over the whole of its area, and was the resort of red and fallow deer, which were strictly preserved for the sport of royalty. These were destroyed during the war between Charles I. and the Commons and have never been replaced. The quarries of the well-known Purbeck stone are situated in the southern part of the island, not far from Swanage, from which they are exported to all parts of the kingdom, but of later years there has not been a demand sufficient to keep more than a few men at work.

A great deal of this stone was used in the rebuilding of London after the Great Fire, in St. Paul's Cathedral, and in the paving of some of the streets and courts.

In view of the attention centred just now on London's bridges it is interesting to note that Purbeck stone is bonded in with Portland stone in the construction of Westminster Bridge.

To gain access to the Isle of Purbeck one must necessarily pass through the town of Wareham, which has had such a chequered past historically that it may be worth while mentioning a few of its points of interest.

There is little doubt that at some time Wareham was occupied by the Romans. Roman coins, pottery, etc., have been discovered, and Roman roads can clearly be traced in this district.

The early Britons named the town Durngueis, the Saxons Vepham or Werham.

It was during the Danish invasion that Wareham suffered most. The castle was destroyed by the Danes and the town left in ruins, but Alfred, marching against them, fought nine battles in the first year of his reign and caught the Danish fleet in a mist off Swanage and drove them on the rocks.

In 1205 King John landed on his way to France, and a few years later visited the town again.

In the Civil War Wareham was again in the midst of the fighting and was twice captured by the Royalists.

Another disaster befell the town in 1672 when practically two-thirds of it was burned down by a disastrous fire.

SAXON CHURCH OF ST. MARTIN, WAREHAM.

Its remaining features of interest are the ancient ramparts, now very little more than grass-grown mounds, and the tiny little Saxon Church of St. Martin, probably one of the oldest in England, and supposed to have been built about 700 by Aldhelm, Bishop of Sherborne.

On the north-east corner will be found an example of the long and short quoin method of building, attributed to the Saxons. A better example of this is to be

WAREHAM: THE SAXON CHANCEL AT ST. MARTIN.

found on the tower of Earl's Barton Church in Northamptonshire.

Although not now used, the Saxon chancel arch and the window in the north wall of the chancel are in good preservation, the remaining windows and columns to the aisle being of later date. The interior dimensions of this miniature church are roughly about 60 feet by 40.

The tower of St. Mary's Church is the most conspicuous object in the town. The interior of the church contains quite a small museum of various relics, among which is a font, 900 years old, with the figures of the twelve Apostles carved in high relief round the bowl: these have been much disfigured, supposedly by Cromwell's soldiers. The vestry contains examples of British and Roman pottery, coins, a knife of Alfred the Great's time, and other relics subsequently discovered.

Built into the wall at the east end of the north aisle are some ancient stones.

Near the altar rails is a double piscina—one of these was originally used for the priest to wash his hands, the other basin was for the washing of the Communion vessels. Since the Reformation, when Wycliffe began his preaching, urging people to do away with ancient customs, the piscina has only one basin.

Near the pulpit are the remains of two stone Roman altars, also the stone coffin of King Edward the Martyr, who was stabbed at the gate of Corfe Castle. The monks of Shaftesbury removed his body to their own monastery.

The chief object of interest on the "island," and one beloved by the charabanc tripper, who come in their hundreds, chiefly supplied by Bournemouth, is Corfe Castle. The ruins, which at one time must have been a striking building, stand on a hill above the village and present a landmark for miles around. In fact it is distance which gives a rather sinister air to that which now remains, and viewed thus from afar as a jagged silhouette against the skyline to my mind gives a much more imposing effect than an examination at close quarters.

The history of the castle and accounts of the strife which took place within and around its walls make very interesting reading.

Some kind of fortress existed here in Alfred the Great's time, about 876. In the following century this was added to and used by King Edgar. Later on it became one of the favourite residences of King John, and was used by him as a State prison. During the reigns of Henry III. and Edward IV. the walls and fortifications were strengthened and improved. It remained a royal castle until the fourteenth year of Queen Elizabeth's reign, when the castle and the whole Isle of Purbeck were granted to Sir Christopher Hatton in perpetuity, who spent much money in restoring and improving the castle.

Subsequently it came into the possession of Sir John Bankes, who became Chief Justice to Charles I. His wife put the castle in a state of defence and held it in a state of siege against the repeated assaults of the Roundheads. In 1644 Weymouth, Dorchester and Wareham fell to the

WEST DOORWAY, PARISH CHURCH, CORFE.

Parliamentarians. Corfe Castle remained the only stronghold in the West Country between Exeter and London, which remained loyal to the King.

On the accession of Cromwell to power the castle surrendered, Lady Bankes being allowed to leave with her family and dependents on payment of heavy fines. In 1646 orders were given for the castle to be destroyed: this, as will be seen to-day, was carried out in a particularly thorough manner.

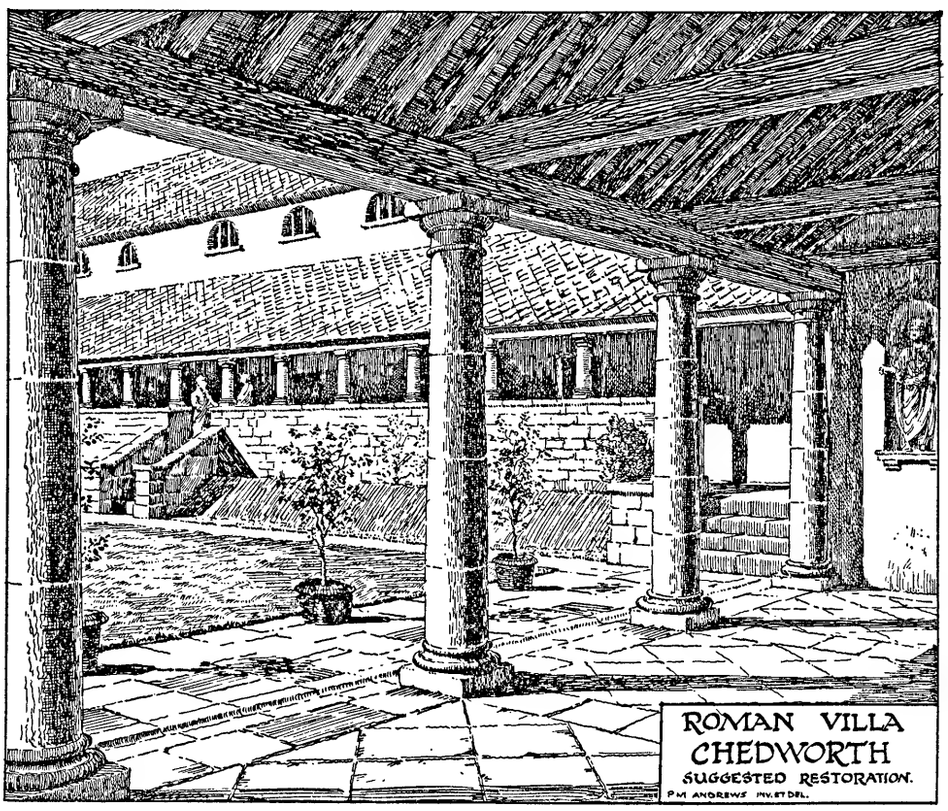
The remains of the King's Tower to the west and the Queen's to the east are still prominent, as also are some of the walls of the great kitchen.

Records also mention the chambers of the King and Queen, the long hall, the long chamber, the parlour, constabulary, chapel, wine cellar, etc., but it is impossible to find any evidence of their whereabouts.

At intervals round the boundary wall are the remains of circular towers, built in positions suitable for defence.

The Roman Villa at Chedworth.

By P. M. Andrews, A.R.I.B.A.



The Roman occupation of Britain began in earnest after the Claudian invasion of A.D. 43. The two previous attempts of Julius Cæsar a century earlier had nominally attached Britain to the Roman Empire as a tributary dependency, and the influence of Rome began to be felt in this country increasingly owing to its close association with Gaul.

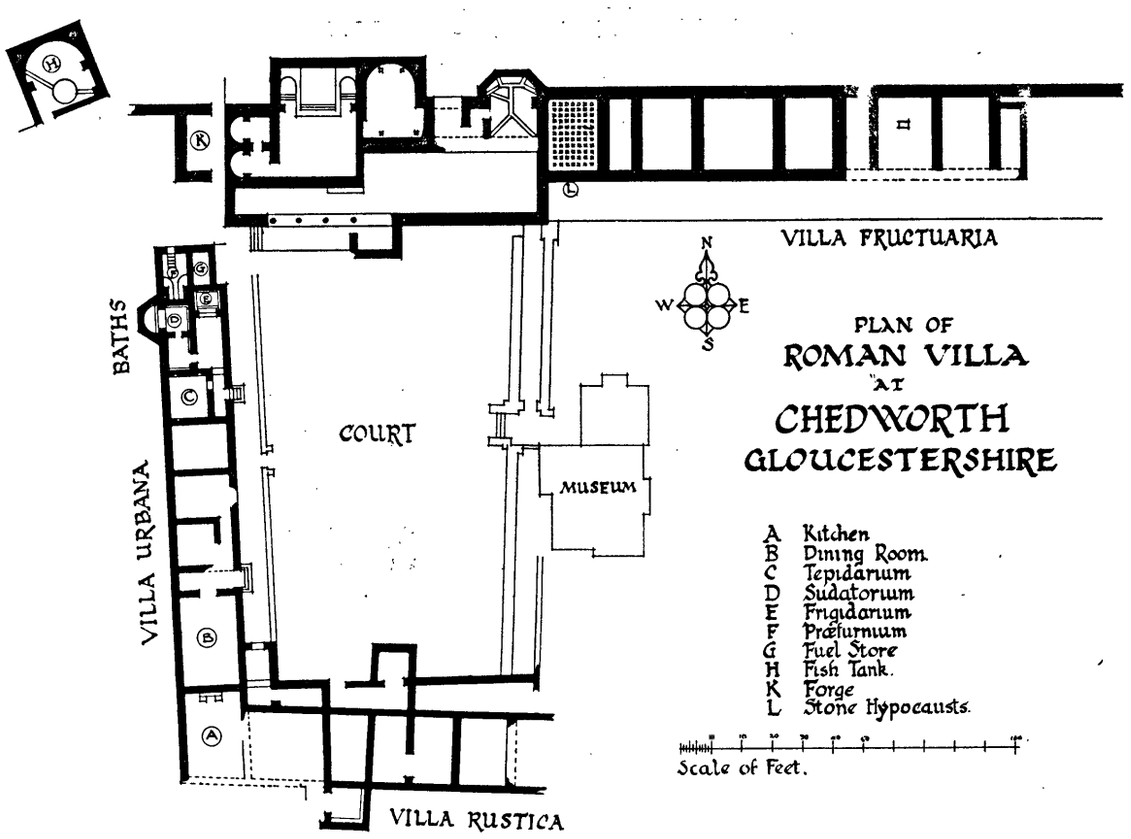
The Britons were in many cases descendants of, or closely connected with, Gallic tribes, and their names, such as the Attrebates, the Cattivellauni and the Parisii are still preserved in the French Artois, Châlons and Paris. The association with the Continent was probably closer during that period than at any time since, and the Roman culture, which, through that connection, was rapidly invading the island, was having a marked effect on the warlike habits of the earlier Britons. The resistance that was offered to the legions of Aulus Plautius was of a very different degree from that which Cæsar encountered from the barbaric Cantii. So that, if the century from Julius to Claudius be included, the period during which Britain was under Roman influence may be said to have lasted about 450 years, or equivalent to the time that has elapsed since the Battle of Bosworth to the present day. It is a singularly remarkable fact, and one that is not often realised, how great a period of our history is linked with that of Rome.

Again, it is misleading to speak of the "occupation," for occupation usually means military occupation. The country was very soon subdued, and by A.D. 85 Agricola had penetrated as far as the Tay. The Caledonians were never conquered and the Welsh were always a doubtful proposition. Roman Britain ended at Hadrian's Wall in the north and the Welsh Marches on the west. In these regions the occupation was purely military, and here were stationed the legionary and auxiliary forces with base towns such as York and Gloucester in their rear. Spasmodic risings rendered the presence of troops necessary as occasion required, and the forced marches which Suetonius Paulinus was compelled to undertake from Chester in order to meet the infuriated Iceni under Boadicea near what is now King's Cross station, only serve to emphasise the peaceful conditions of the surrounding country.

The use of the words "camps" and "chesters" have helped to give a martial significance to the occupation. To the Saxon invader every Roman settlement was a Castra, which he called Caester, and the false meaning thereby implied has remained. Such camps as are still to be traced are usually situated on the frontiers, or were temporary affairs constructed while the legions were on active service during the few years of the conquest.

Aulus Plautius landed somewhere in the neighbourhood of Portsmouth and proceeded with very little opposition northwards. The first tribe he came into contact with was the Dobuni, who inhabited the regions of southern and western Gloucestershire. These people were of a very peaceful disposition and in decided contrast to the Iceni of the east and the Brigantes of the north. The British settlement of Caer Corin was soon formed into a town on the Roman model, and was given the name of Corinium, which in the Saxonised form of Cirencester survives to this day. The later divisions of the province of Britain are hard to define, but it seems clear that Britannia Prima included most of the country east of the Severn, and that Corinium was its capital and, as such, one of the most important towns of Britain, second only to London itself.

Seven miles north of Corinium are the ruins of Chedworth Villa. These were discovered in 1864, and the story goes that while digging out a ferret in Chedworth Woods a number of dice-like objects were unearthed, which proved on examination to be Roman tesseræ. Further excavations soon revealed the remains of a large building including a number of important mosaic pavements. These have now been fairly completely uncovered and all movable objects collected and placed in the museum that has been built on the site. The walls, which in some cases are as much as five feet above the ground, have been protected from the weather, and the tessellated pavements roofed over. The whole site has recently, it is satisfactory to note, been taken over by the National Trust. The ruins are now exposed and the plan can be studied on the spot from the actual walls themselves, a process which, as a rule, is impossible as the remains of houses and other buildings dating from these times are of necessity reburied after having been



recorded, and objects of interest must be sought for in local museums some distance from the actual site.

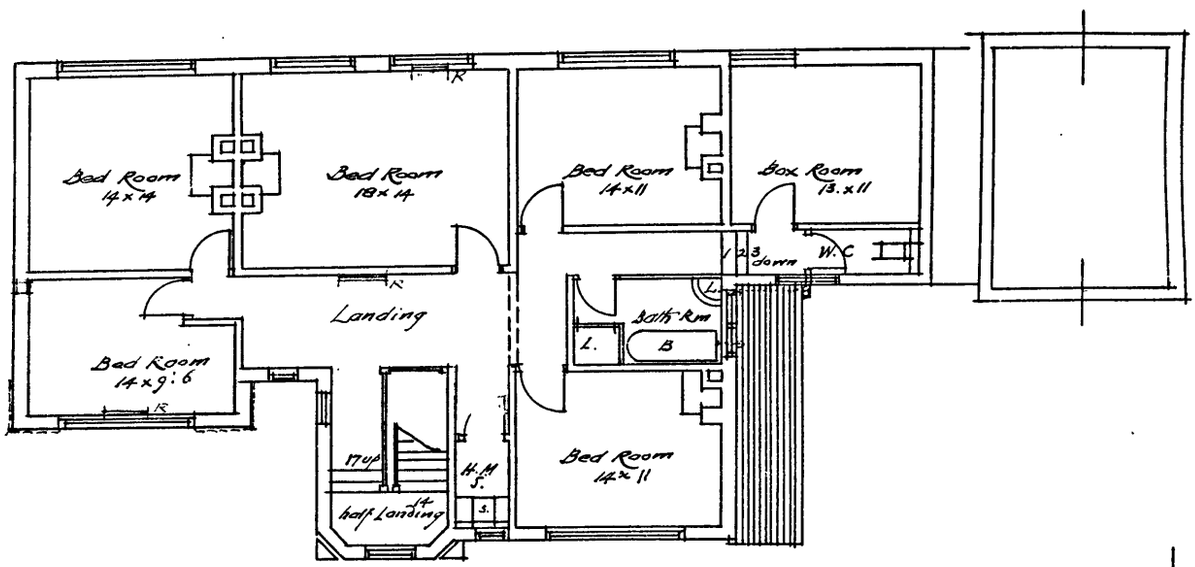
The villa at Chedworth is of the courtyard and corridor type, and the area enclosed measures roughly 100 by 150 feet. It is built on ground which rises sharply towards the north-west, and the view from the principal rooms, which face due east, is one of considerable extent and beauty.

The buildings are laid out round three sides of a square, the fourth being left open; though there are indications that possibly there was a base court surrounded with outbuildings, in which case this establishment would compare in size and importance with the extensive remains at Woodchester. The principal rooms occupied the western side of the quadrangle and contained a very complete set of baths. On the south side, it is conjectured, are the servants' and slaves' quarters, but the excavations here are incomplete and the remains discovered so completely destroyed that it is impossible to say with any accuracy the use to which the individual rooms were put. The series of chambers along the northern side are entirely separate from the rest of the house, and owing to their varied and unusual shape and extent have given rise to much speculation. It seems clear, however, that the eastern end of this wing formed the Villa Fructuaria, and here were situated the barns, granaries and workshops that would be a necessary adjunct to a villa of this size.

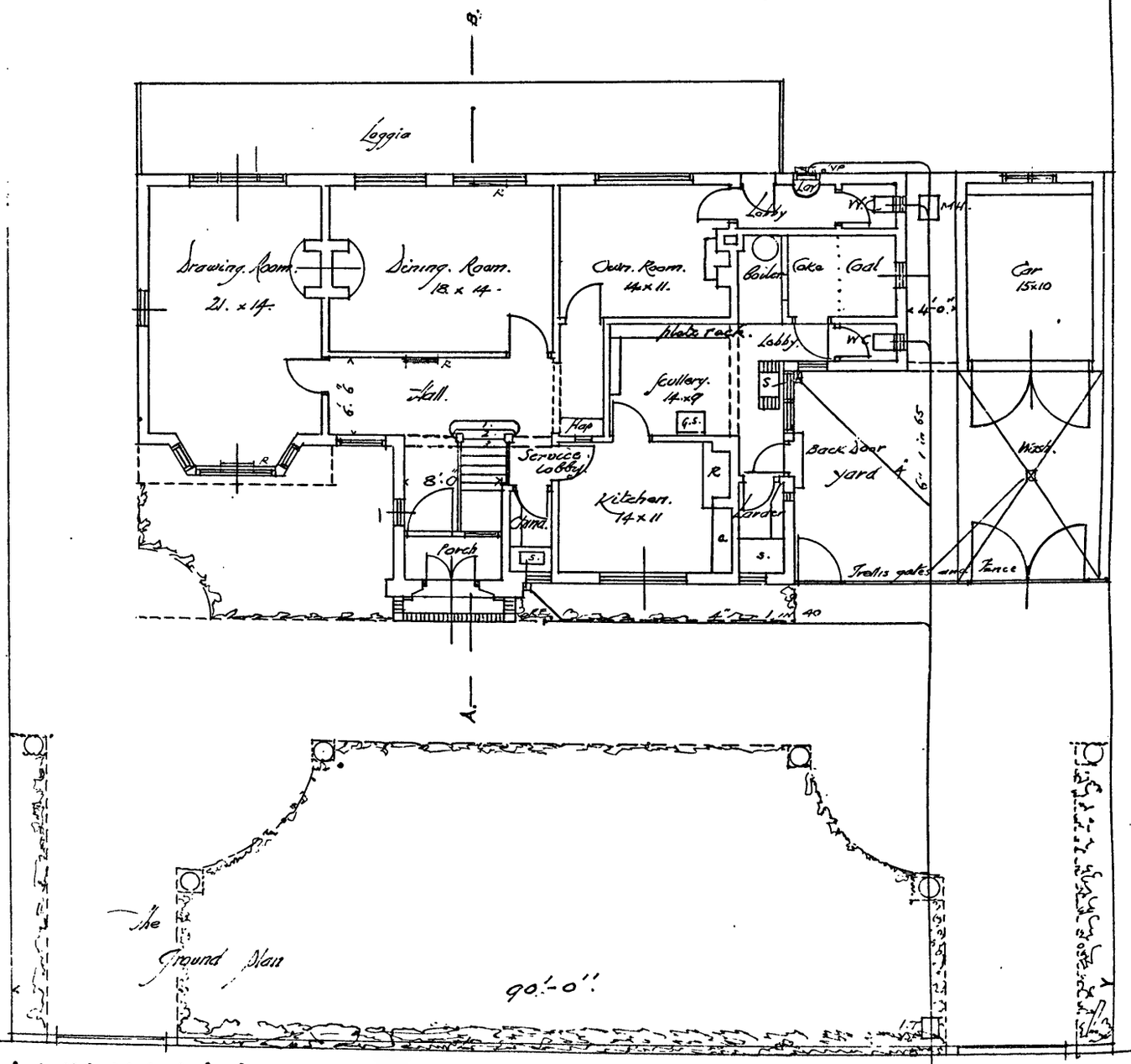
At the southern end of the west wing is a large apartment about 19 feet wide and 29 feet long, with a smaller room adjoining and separated from it by an arched opening. Both these chambers have fine mosaic floors though different in design, and are heated by hypocausts. This is the chief room of the house, and was doubtless the Triclinium or dining-room. Adjacent to this was a chamber the purpose of which is doubtful, but may well have been the kitchen as it was connected on one side with what seems to have been an open yard which communicated with the servants' quarters. The corridor which runs along the west wing is stopped at this end by a small room which was evidently the heating chamber for this part of the house, the enclosed space adjoining being the fuel store. North of the principal chambers are three or four rooms of doubtful purpose though they were probably all of the reception room order, and the space behind the small lobby may conceivably have contained the staircase, there being no reason to suppose that the house was deficient of an upper storey.

The baths which complete this wing are very complete, and will repay careful examination. They conform to the type usually associated with the larger villas and are similar in many respects to those at Spoonley Wood near by, and, though on a small scale, are not unlike the public establishments at Caerwent and Silchester. They were entered from a corridor through a passage which communicated by a door with a square chamber marked C on the plan, which was probably the dressing room. At the north end the passage led into an oblong chamber with a square recess at the end. This was the cold bath and the steps and stone seat round the bath are still remaining. On the left is another door giving access to a chamber the walls of which were lined with flue tiles which conveyed the heat from the hypocausts below. This leads again into a smaller room similarly treated and provided with a semi-circular recess at one side which contained the hot bath, the room itself being the sweating room or Sudatorium. All these chambers with the exception of the passage leading thereto were furnished with tessellated pavements laid on concrete floors, and with the exception of the Frigidarium supported on brick pilæ. Outside was the stokehole, with steps leading down to it, and an archway which allowed the heat to enter below the floors and supply the requisite warmth by means of the wall flues, many of which have been recovered. On either side of this archway are haunches of masonry which in all probability supported the boiler for the hot bath. Adjoining was the fuel store and accommodation for the bath attendant.

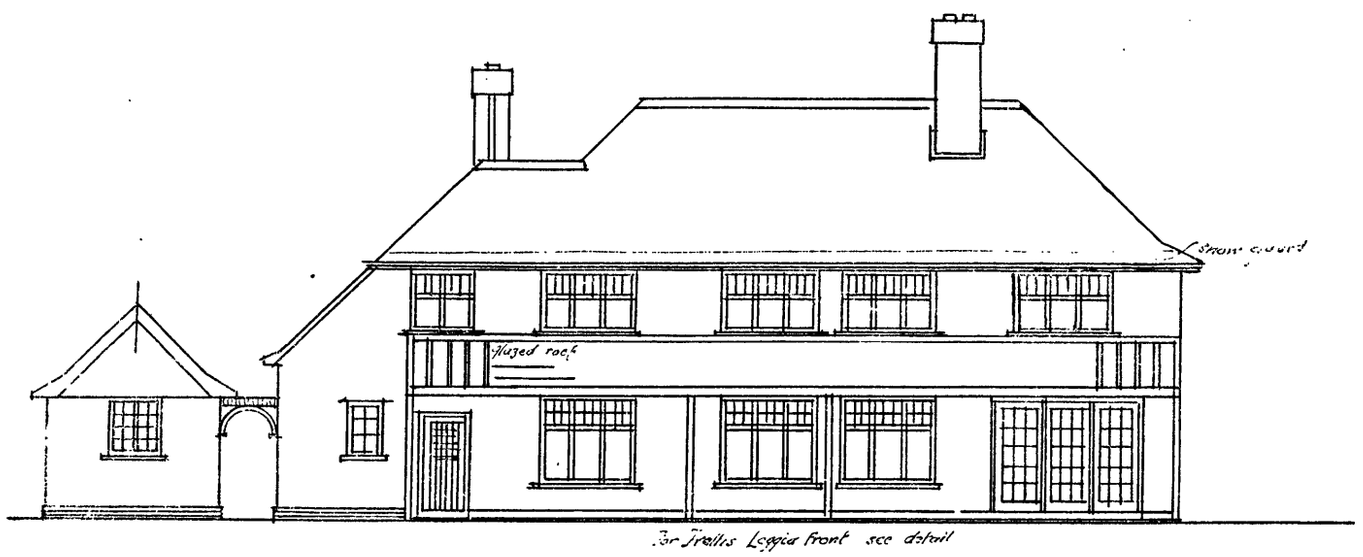
From a study of the plan it will be seen that the buildings occupying the north side of the quadrangle are of an irregular and unusual shape, and much ingenuity has been exercised in attempting to explain their function. It has been suggested that these were the foundations of a second villa and the semi-circular and semi-octagonal chambers were its baths. There is no evidence to support this view; land was not expensive in those days and there is no other case of a double villa of this nature outside the walls of a town. The bath idea seems popular, for a second suggestion put forward is that these were the baths for the slaves and dependants. That again is untenable. The Roman, or



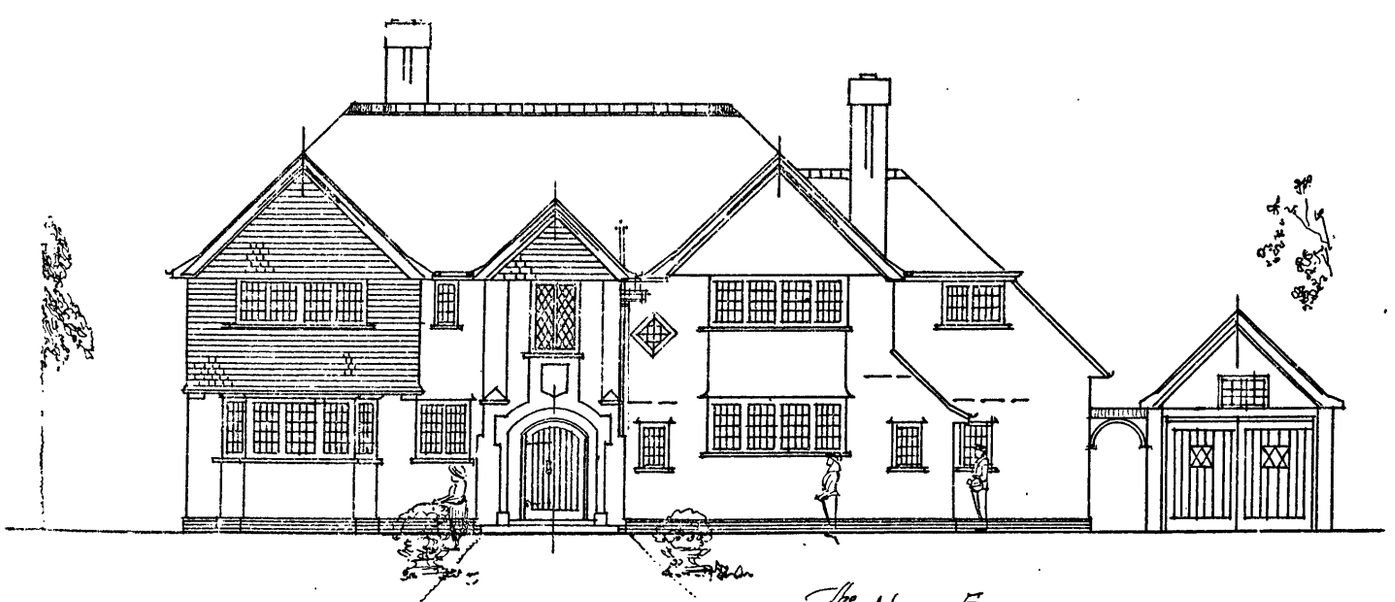
The first floor plan.



The Ground Plan



The South Front.

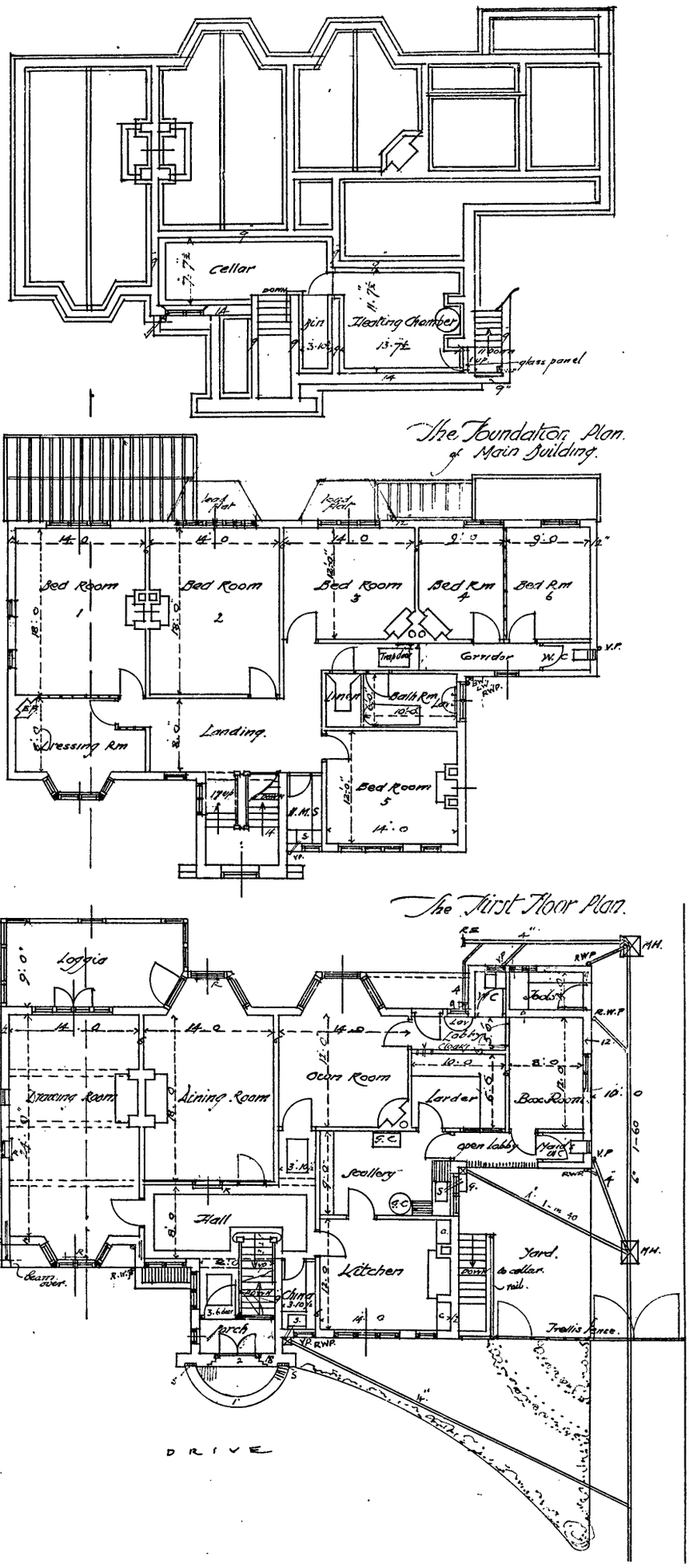


The North Front.

No 7. House Greenhills Road Charlton Kings
for J. Arlow-Chapman Esq:
Henry L. Farmer F.R.I.B.A. 57 Colmore Row Birmingham. Oct:10:24.

Scale of Feet. 0 5 10 20. 30. 40.

COLUMBIA
"PHOTO-LITHO" WM BROWN & CO. LTD LONDON, E.C.3.



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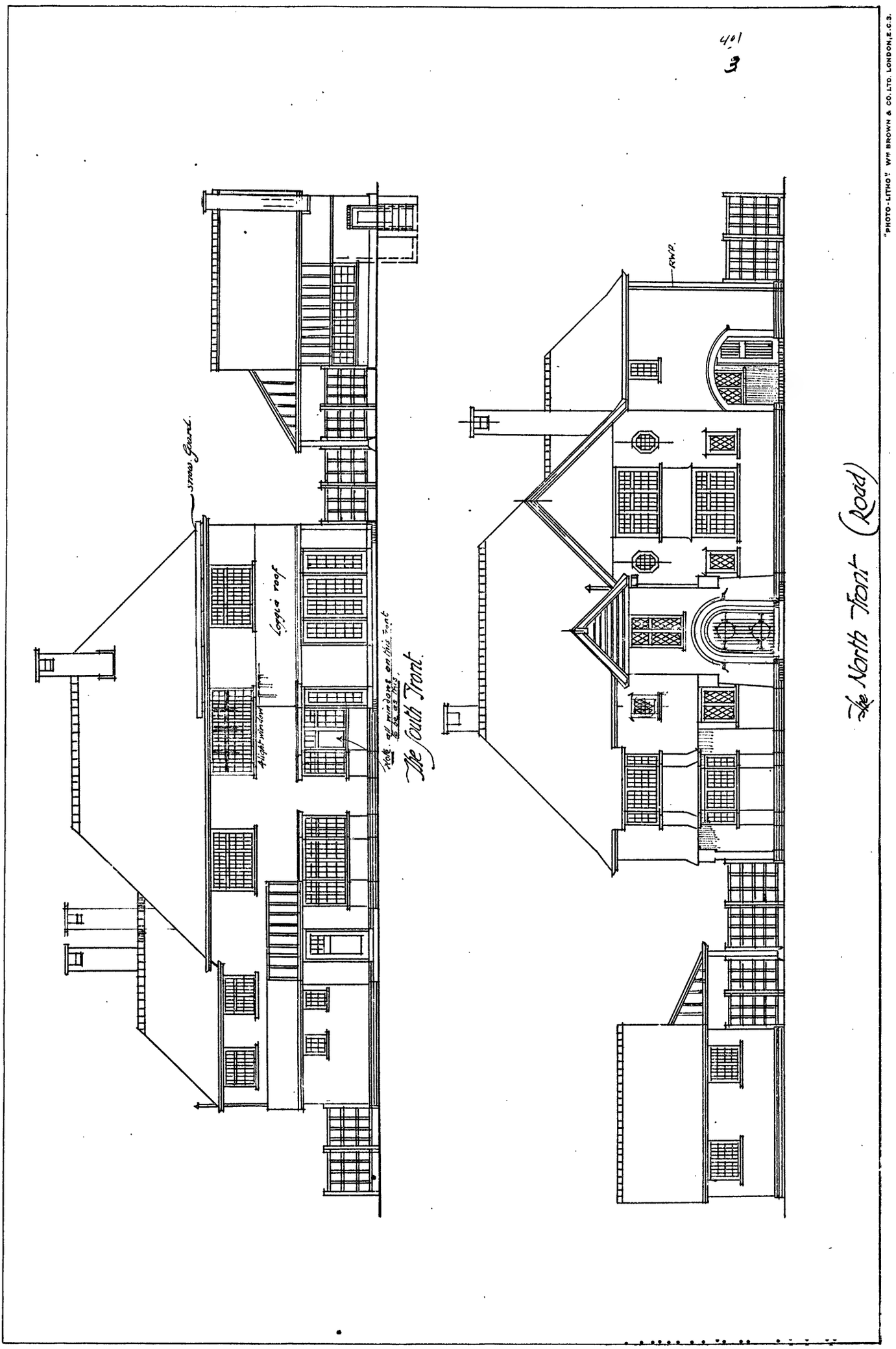
HOUSE (No. 5), AT GREENHILLS ROAD, CHARLTON KINGS.



HOUSE (No. 5), AT GREENHILLS ROAD, CHARLTON KINGS.

HENRY E. FARMER, ARCHITECT.

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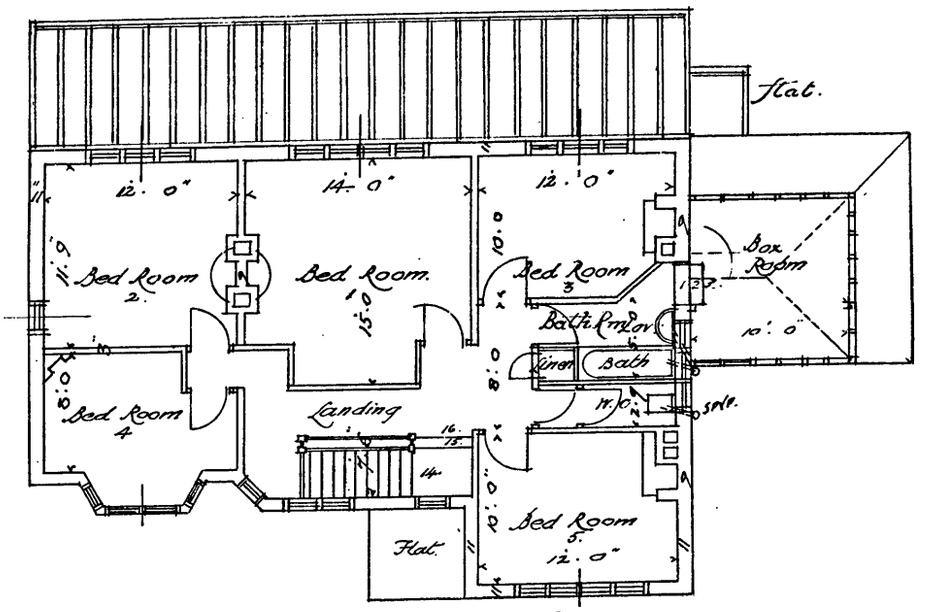
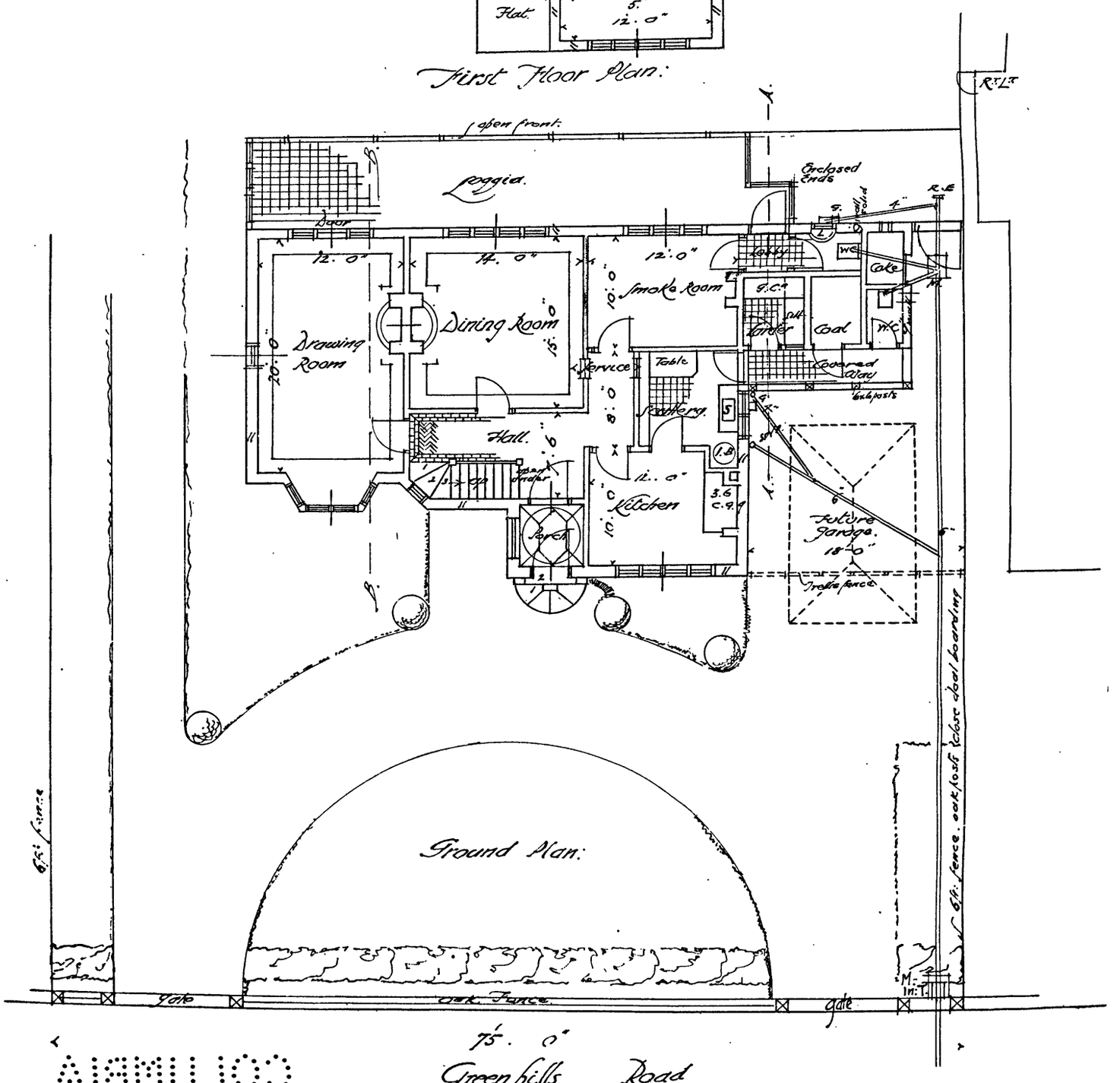
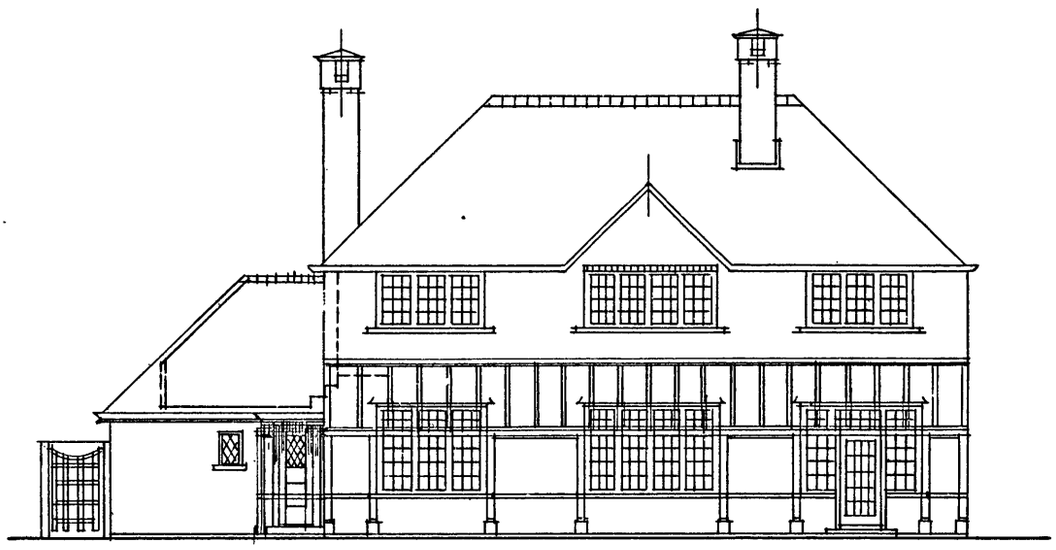


First Floor Plan.



HOUSE AT GREENHILLS

HENRY E. FA



South

North

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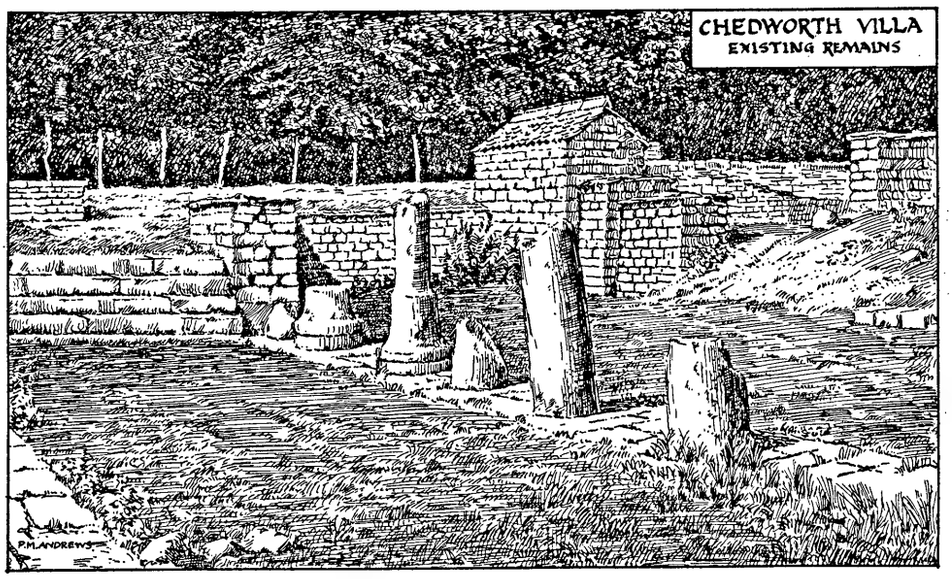
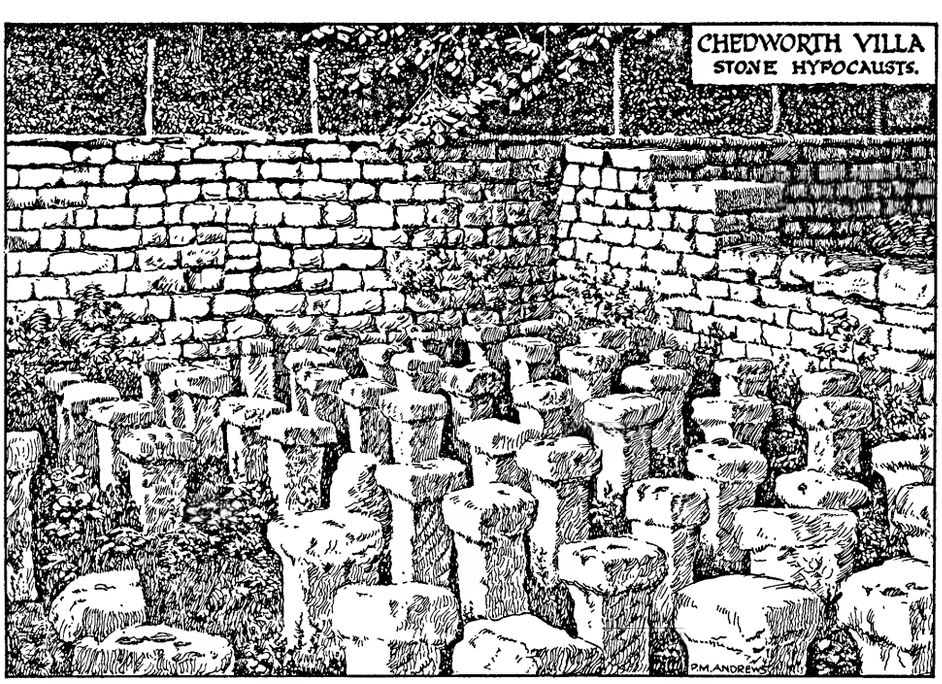


rather the Romano-Briton, may have been a kind and considerate master, but he would hardly have built large and luxurious baths on this lavish scale for his servants and himself been content with the modest arrangement described above. Yet another theory is that the building was not a villa at all, but a mansio or posting house. The only evidence adduced in support of this claim is the fact that horseshoes have been found on the site. It is hardly likely that an establishment of this kind would be built only seven miles from a large town and two miles off the main road, the Roman Fosse Way.

What then was the use for which these curiously shaped chambers were constructed? The only feasible solution seems that they were built for some kind of industry. The rooms are connected with the courtyard by means of a portico supported on columns, the lower parts of which still remain standing. This communicates with a large oblong hall, on the north side of which are two rooms terminating, one with a semi-circular and the other with a semi-octagonal recess. West of these is another large apartment containing a square tank at one end with two semi-circular tanks flanking it, and adjoining this are two apsidal chambers connected by a doorway. At the other end of this block is a square room with a very complete set of stone pilae to form a hypocaust, with a heating chamber adjacent. All this evidently points to some industry connected with washing and drying and provision being made to support greater weight than usual, for this is the only part of the house where stone pilae are employed.

It is known that at Silchester and other places the art of dyeing and fulling was practised by the Romans, and there is every reason to suppose that here at Chedworth we are in the presence of a small though very complete establishment devoted to this industry. This theory is further supported by the presence of a good water supply from springs on the hillside and the river Colne below, and also an outcrop of fullers' earth in the vicinity. The cloth was washed and treated in the usual manner in these chambers, then conveyed to the drying room of which the stone pilae are still in existence, after which it was stacked in the large hall and finally loaded on to carts drawn up outside the open portico. This seems to be a reasonable hypothesis and one which meets the difficulties and is supported by the presence of the two elements essential to its success—running water and fullers' earth.

The sketch showing the conjectural restoration sufficiently explains the method of construction common to villas of this type. The walls were of stone and were probably plastered. The corridor along the Villa Urbana was formed by a solid wall about four to five feet high carrying a lean-to roof supported on short baluster-like columns, a number of which are exhibited in the museum. The roofs were covered with Stonesfield slates similar to those used all over the Cotswold district, the only difference being



that the Romans reduced the weight by cutting off the corners and laying them diamond-wise. The floors of the corridors were formed of stone flags and the more important apartments furnished with mosaic pavements. It is impossible to speak with any exactness of the interior, but from fragments that have been discovered it would appear that the walls were plastered and covered with painted decorations and the windows certainly glazed. The walls of the Sudatorium were completely lined with hollow tile flues, through which the heat ascended. These were not plastered over, for their markings clearly show a rough idea of decoration and were not merely to provide a key for the plaster. Of woodwork there is no trace, but there is no doubt that timber entered largely into the construction of this house as in other buildings of this time of which there is more positive evidence.

The date when this villa was constructed is a question that cannot be solved with any degree of accuracy owing to the absence of coins and the paucity of inscriptions. A stone with the word PRASIUTA inscribed upon it has been discovered, but this only renders the matter more obscure. If, as is suggested, Prasiuta refers to Prasutagus, he was the husband of Boadicea, and the persecution which his family and people underwent during the reign of Nero culminated in his wife's rebellion in A.D. 61, a date which is clearly too early. From the resemblance in plan and construction to similar buildings of which there is more detailed evidence, it would appear that it was built early in the third century and the northern annexe either rebuilt in its present form or added to it a century later.

Whether Chedworth Villa was the country residence of the Prefect or Corinium, who possibly was a native by birth though a Roman citizen by adoption, or whether, as has recently been suggested, it was built by a certain Censorinus for the purposes of sport, it will, after this lapse of time, be impossible to decide. The discovery of hunting spears, together with antlers and boars' tusks show that deer and other animals of the chase were hunted in these woods, but considering the size of the villa and its proximity to Corinium it seems almost certain that it was the country seat of some important functionary of that town.

The evidences of pagan worship in the form of altars and statues are not very extensive. A stone altar was found in the detached building marked H on the plan and fragments of statues in the recess next the dining room, tending to prove that this apartment was the Lararium. There is also evidence to warrant the belief that the Christian religion was practised here at some time or other, though there is nothing to support the contention that the detached building H was a Baptistery. From the altar discovered in it, and the fact that it was obviously a water tank, it was probably a Nymphaeum and might possibly also have been used for storing fish. The only evidence of Christian worship that has so far been found is the CHI RHO monogram incised on the foundation stone of the main entrance, but this is quite decisive, and the lack of other Christian symbols in no way invalidates the claim, as witness the church at Silchester where nothing displaying any definitely Christian symbolism has been found.

Christianity was introduced into Britain at a very early date and was practised in private houses long before any separate ecclesiastical establishments were thought of, and it is more probable that the plan of the early church evolved from the Atrium and Tablinum arrangements of the Roman house than from the public Basilica. The recessed portion of the Tablinum or Triclinium was the repository of the household gods and as such the most sacred portion of the house, and here at Chedworth is exactly that arrangement with fragments of the Lares and Penates found in this very chamber. With the change in religion this became the Sanctuary, and it seems possible that we have before us a Christian Church with nave and chancel in embryo formed by the Triclinium and Lararium of the Roman villa.

No objects of a military nature have been found during the excavations and nothing is more eloquent of the profound peace that the Roman arms conferred on Britain than a study of these remains. The strong defences along the Welsh border held in check the Silures. The Icenian and Brigantian risings were spasmodic outbursts quickly suppressed. Hadrian's Wall kept the northern frontier of the Empire inviolate and the Count of the Saxon shore dealt with the pirates from the Frisian flats. The only warlike spectacles that these people witnessed were the marching of the legionary drafts along Ermine Street to Gloucester and thence to the military stations of Caerleon and Caerwent. It is therefore not surprising that education should have grown, that the Latin tongue should have been the common speech even among the slave classes and that the Roman culture should have been planted and flourished exceedingly in this remote province.

Book Notes.

"English Furniture at a Glance." Charles H. Hayward. The Architectural Press, 5s.

This little book admirably meets the demand for a handy book of reference, or a book of introduction to the big subject of English Furniture. To the architect furniture must always necessarily be of great interest, and happy is he who has the opportunities and talent to design furniture for houses of his own creating.

The subject is treated here in groups, each illustrating, from the 16th to the 18th centuries, one branch of furniture, chairs, tables, wardrobes, mirrors, and so on. The descriptions are concise, and the drawings, of which there are many, are quite adequate for such a handbook, and what better way of glancing at English Furniture is there than by looking at drawings of the various pieces ?

A book that all should have who know little about furniture and who wish to know a great deal more.

E. L. G.

Trade Note.

A Double-Pole Switch in a Single Tumbler Base.

The advantage of a double-pole quick-make and break switch action compacted to the dimensions of a single tumbler switch base is obvious—especially when the cost compared with that of a coupled tumbler is considered. Details of the "Crabtree" Single Base Double Pole Switch (supplied also as a combined switch socket) indicate that it is possible to efficiently control heavy currents by such a method and thus save the additional expense of a coupled switch. The "Crabtree" Single Base D.P. Switch embodies all the precepts of advanced design and construction, and has many features of interest among which are the following :—

The patented arrangement of contacts and switch arm ensures maximum double break on each pole. All covers are fibre-lined. Wiring is facilitated by the terminals being finished in bright copper for positive—black for negative. The switch has been tested 2,000 volts to earth, 4,000 volts between poles.

It is of interest to record a recent test made by Faraday House both upon a 5 amp. switch and also on switch socket combination as follows :—The switch was started on a 3 amp. load (250 volts) switching on and off with a half amp. increase at each operation. A load of 61 amps. was borne before the switch finally broke down.

When the small size of the switch—2¼ in. base diameter—and its rated capacity are borne in mind, the full significance of such a drastic test will be realised.

Blackpool.—The Blackpool Entertainments, Ltd., are proposing to erect four lock-up shops at the Hippodrome, for which plans are being prepared by Mr. Halstead Best, P.S.I., architect and surveyor, Church Street, Blackpool.—Plans have been approved by the Corporation for the erection of twenty-two houses on the Warbreck Hill Estate, and fourteen houses in Sutherland Road, by Mr. J. R. Fielding, builder, Queen Street, Blackpool.—Mr. F. H. Gorst, architect and surveyor, Birley Street, Blackpool, has prepared plans for the proposed erection of 82 houses off Vicarage Lane, Marton, for Mr. J. Marsh, builder, and for 24 bungalows off Westfield Road and Queens Roads Blackpool, for Messrs. Rigg & Thornley, builders, and 30 house, on land off Westfield Road and Queens Road, for Messrs. Taylor & Co., builders.

Hollinwood.—The Royd Mill (1919), Ltd., cotton spinners, propose making extensions to their premises for the installation of additional plant and machinery. Plans prepared by Messrs. J. A. Howcroft & Sons, architects, Union Street, Oldham. Building contract placed with Messrs. J. Partington, Ltd., Middleton Junction. Steel work by Messrs. Bannister, Walton & Co. Ltd., Trafford Park, Manchester.

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Included in the Illustration adjoining are reinforced concrete buildings erected on the Kahn system and representing twelve separate contracts from one source.

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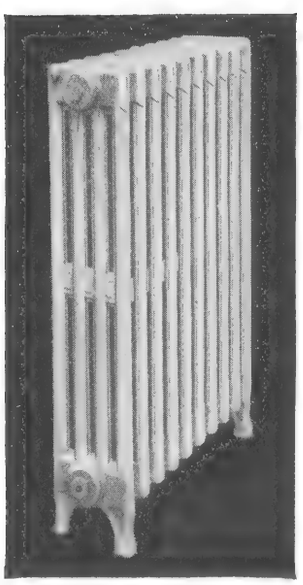

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Competition News.

Royal Society for the Encouragement of Arts, Manufactures and Commerce.

OPEN COMPETITION OF INDUSTRIAL DESIGNS.

In order to encourage the study of designs for industrial purposes, the Royal Society of Arts have decided to hold annual competitions. The second competition will take place in June, 1925. It will be open to two classes: (*a*) All British Subjects (with certain specified limitations as to age in the Sections of Architectural Decoration and Furniture), and (*b*) students in British Schools of Art.

Entries can only be received from individual designers, not from firms.

The subjects of competition will be the same for both classes of candidates, but in considering the work the judges will bear in mind to which class the competitors belong.

The competition will be divided under the following heads:—(1) Architectural Decoration, (2) Textiles, (3) Furniture, (4) Book Production, (5) Pottery and Glass, (6) Miscellaneous.

Particulars of the subjects prescribed in each Section, together with the prizes offered in connection therewith, will be found below. The Council reserve the right of withholding any or all of the prizes offered, or of awarding prizes of less value.

Designs for which prizes are not awarded may be "highly commended" or "commended," at the discretion of the judges.

The judges will be appointed by the Council of the Royal Society of Arts on the recommendation of the various Sectional Committees. *In making the awards it shall be an essential condition that the designs approved are suitable for the materials for which they are intended.*

The Society will confer its diploma on any candidate whose work shows exceptional artistic ability and practical knowledge of the materials and processes of his trade.

After the awards have been made, a number of selected designs will be exhibited, by the kind permission of the Director, at the Victoria and Albert Museum, South Kensington, and subsequently at suitable centres in the provinces, where they will be brought to the notice of manufacturers likely to be specially interested in them.

The second competition will be held in June, 1925. Intending competitors must communicate between May 1 and 15 with the Secretary of the Royal Society of Art, who will supply them with the necessary forms, labels and instructions for the despatch of their designs to the Victoria and Albert Museum. No designs must be sent to the Royal Society of Arts. Candidates will be required to pay for the carriage of their works to and from the place of exhibition.

Designs must be mounted on a flat surface, not rolled up. The size of the mounts should be either half-imperial (15 in. by 11 in.) or imperial (30 in. by 22 in.), except in special cases.

All possible care will be taken of the designs, but the Council accept no responsibility for injury or loss.

The following are the subjects of competition in the various sections in 1925:—

ARCHITECTURAL DECORATION.

DECORATIVE ARCHITECTURE.

A Travelling Scholarship of the value of £150 for one year will be offered on the following conditions: Candidates must not be over 35 years of age. They must be prepared to travel in France, Italy, Spain or Flanders for six months, which, however, may be broken up into periods of, say, three or two consecutive months.

SUBJECT OF COMPETITION.

The subject is a Memorial Library for a College, suitable for housing a small but rare collection of books. The superficial area of the room is not to exceed 1,500 feet. The method of arranging the bookcases and displaying a few *objets d'art* is left to the competitor. Cost is not a primary consideration, and the use of expensive woods, as well as inlays of ivory, ebony or metal, in addition to marble, can be considered. In a suitable place a commemorative panel or some other *motif* should remind the visitor of the origin of the Library. The scheme of the ceiling, which can be treated as a space for decorative painting, as well as the pattern of the floor, must harmonise with the whole design.

A preliminary competition of twelve hours will be held in London and other centres in April, 1925. Candidates must give notice of their intention to compete to the Secretary of the Royal Society of Arts, not later than March 14. For this competition the following drawings will be necessary: A plan of the floor, one section, and a plan of the ceiling, all to a scale of a quarter of an inch to a foot.

For the final competition two months will be allowed to the competitors, selected after the first competition. The finished drawings are to include the following: Plans of floor and ceiling and two sections to a scale of half an inch to a foot, a detail drawing of the fireplace or some other feature showing the complete height and treatment of the room from floor to ceiling. Competitors should bear in mind that electric lighting and central heating are to be considered.

WALLPAPER.

The subject of competition is as follows: A design for a wallpaper suitable for use in large panels in a theatre or cinema, to be reproduced by block printing in not more than four colours. Size, 42 inches repeat by 21 inches wide. Prize offered: A prize of £10 10s. is offered for this subject.

FURNITURE.

The subjects of competition are as follows: (1) Designs for the complete furniture of a dining room decorated in eighteenth century period; (2) designs for the complete furniture of a bed room, decorated in William and Mary period; (3) designs for the complete furniture of a study, without reference to traditional style; (4) designs for the complete furniture of a working man's living room; (5) design for a cabinet for decorative china; (6) designs for writing table and chair; (7) designs for garden furniture in cane.

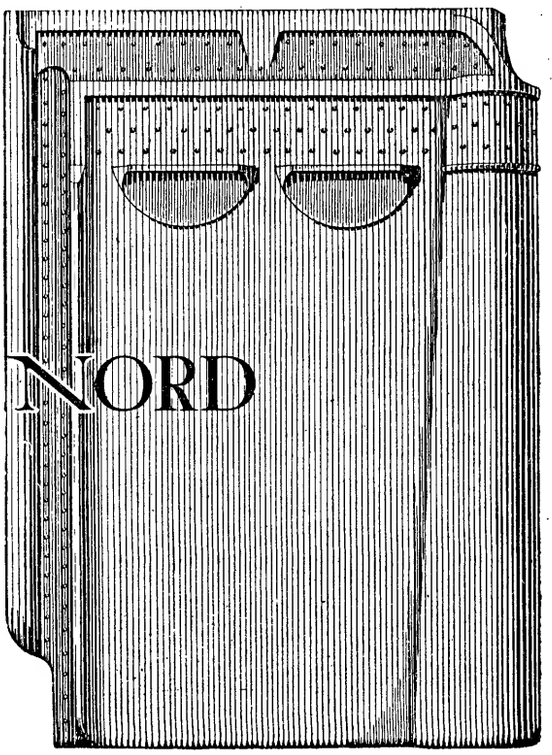
Prizes offered: A prize of £20 is offered for the best set of designs in each of the groups (1), (2) and (3), and a prize of £10 10s. for the best designs in each of the groups (4), (5), (6) and (7). Second prizes may be awarded at the discretion of the judges. No candidate may receive more than two first prizes. Candidates in this Section must not be over 25 years of age.

We give the subjects of competitions which may appeal to young architects. Other competitions include posters for various industrial firms.

"The Architect" Fifty Years Ago.

DECEMBER 26, 1874.

Among the buildings for public purposes in the Metropolis the most conspicuous work of the year is no doubt the new Alexandra Palace. It will be in the recollection of all that the ill-fated structure which was raised on the top of Muswell Hill with the help of the materials of the International Exhibition building of 1862, after being open for an extremely brief period, was consumed by a conflagration lighted at that plumber's portable fire which so nearly robbed us of Canterbury Cathedral, and has so often been fatal to mediæval buildings. The spirit of the proprietors, who are chiefly, if not solely, Messrs. Kelk & Lucas, rose with the occasion; a new design was at once put in hand, and a new structure commenced. This is without doubt a most remarkable work, not as a specimen of first-class architecture—it is far from being that—but as a display of what English enterprise and pluck can accomplish, undaunted by the most crushing accident, and unchecked by a series of the most formidable difficulties. The fire took place on the 9th of June, 1874, and not only was it for long seriously contemplated to reopen the building in May or June of the present year, but so much progress was made with the works that there can be no doubt this could have been done had the need for so much haste been felt to be imperative. Indeed, the main structure has now been some time completed, and the works in progress are chiefly decorations, fittings, and finishings. The new Alexandra Palace is by no means the old one rebuilt; it is a new building on a fresh plan, differently arranged, and adapted to different uses—occupying, it is true, the old site, but extending beyond it in various directions, and entirely dissimilar in treatment and in the means used to produce architectural effect. No such feature as the old central dome now appears, and height is obtained by the less effective but also far less costly expedient of towers with tall roofs. A large hall with a semicircular roof having an organ and orchestra at one end crosses the building in the situation occupied by the old central transept, but instead of a nave there occur covered courts, complete in themselves, and not forming an uninterrupted promenade like the nave at Sydenham or at the destroyed building. This strikes us as the most doubtful innovation of the whole. Nothing has been more uniform than the tendency of the British public to promenade up and down the nave of each of the large exhibition buildings from 1851 downwards, and we doubt the wisdom of checking this propensity. On the other hand, the most complete preparations have been made for meeting other requirements of a place of public entertainment. The refreshment rooms and dining-rooms, with the necessary kitchens, services, stores, and cellars, are most complete, and a large theatre and a large concert-room, each approached from the general building, and arranged for very numerous audiences, have been formed. No doubt the critically disposed will have objections to raise as to certain of the details, and even as to the general design, but this is not the occasion for examining them closely, and we prefer congratulating Mr. John Johnson, the architect of the building, on the many proofs of ability and ingenuity which his work presents, and the proprietors and contractors on the spirit and energy which they have displayed.



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and these are some of the roofs, picked out indiscriminately, where you can see the tiles:

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The Architecture Club Dinner.

On Thursday, December 18, at the Hotel Cecil, the above club held their seventh dinner. The attendance was small as compared with the last occasion, when the late Prime Minister was the chief guest of the evening. From a social point of view the event was a great success and many new and useful friendships must have been formed. One understands that one of the aims of the club is to secure a cordial relationship between the architect and members of the Press and others interested in architecture and beautiful building. The speeches were poor, though the company were entertained by some frank expressions on architecture from guests who admitted their limited knowledge.

The time worn subject of Regent Street was again very much to the fore. One speaker seemed to lament the regularity of the new street. This view just shed an interesting light on the fact that many people did not consider the old Nash elevations as uniform in character, though we fancy that the majority of the public never examined the old buildings with a critical eye, their inspection was limited to the shop windows and ground floor facades. We have over and over again stated that Nash's original Regent Street must have been a very fine architectural piece of work. But the Regent Street of 1920 could not be admired as a uniform scheme, but represented a number of interesting relics of the past glory, intersected with modern buildings which made Nash's work appear unpractical and out-of-date, which it most certainly was. The dear old coal fires of our parent's time are giving place to the more convenient methods. Domestic circumstances have forced the departure of these cheerful looking inadequate heating contrivances. So the defaced Regent Street has had to give place to modern shopping requirements. Because the architectural world appreciated the old Regent Street is no reason why the business world should be compelled to carry on its commerce in little rabbit holes and burrows. One speaker thought that if the Regent Street Liberty's building site could only have been laid out as a grass plot, with possibly a flagstaff in the middle, Regent Street would have gained a restful spot and Tudor House, Argyll Street, would be better seen. We can understand and visualise the artistic picture that such a setting would create. Many have decried Tudor House, but one is inclined to counter the adverse opinion with the question: Is there anything better in Regent Street? Tudor House represents a modern adaptation of a mediæval style of architecture—are the facades of new Regent Street better interpretations of the style of architecture they are supposed to express? We think not, and therefore we are inclined to resent criticisms levelled at Tudor House. If Regent Street were to contain one beautiful building after another then we should feel less tolerant towards Tudor House, but to-day Tudor House is by far and away superior to a great many architectural efforts that are going up in the place of Nash's Regent Street buildings.

In the course of a few words of the activities of the club, the Chairman said that they felt that they could see all around them the good works the club was doing. While, of course, things would go on very much as usual if the club had not been formed, undoubtedly things would not be quite the same if the club were to disappear. The club had been doing as much as could be expected to promote the erection of good buildings, and to prevent the disappearance of good old buildings. The Committee had decided that there would not be an Exhibition in the spring of next year, but they hope to hold one in the autumn.

Sir Giles Gilbert Scott, in the course of his speech, said he owed a great deal to the Club, which had done much to promote public interest in architecture. One of the great difficulties of the architect compared with those who practised the other arts was that the architect had to deal with so many interests, and so many people. Most of the other arts were confined solely to the artist himself and the media through which he worked, whereas the architect was up against the public, the clients, building committees, and various other interests. It was exceedingly difficult to reconcile every interest, practical and æsthetic, and to satisfy the wishes and requirements of all the people concerned in a new building. In the case of Liverpool Cathedral he had been exceptionally fortunate in the very great help he had received from the Building Committee.

Mr. Norman Wilkinson, who was one of the speakers, said he could not help thinking that in the future the present Regent Street, with its uniformity of building, would be pointed to as the architecture of this age. Of the subject of street posters he said the modern street poster, apart from railway posters, was not the work of the artist at all but of the manufacturer. Too often the manufacturer thought he knew what he wanted, and intended to have it at all costs, without realising that what he wanted and what he thought was good was not necessarily what the public liked, or what was good. Many fine buildings were absolutely spoilt by the posters which were plastered over them, whereas more often good posters would decidedly improve many buildings.

General News.

ADELAIDE.—The Town Council have asked Mr. H. P. Beaver, the town clerk, to report as to the feasibility of the present Government House site being utilised solely for State and Civic purposes, in particular for the erection of a new town hall, if satisfactory arrangements can be made with the State Government for the transfer to the Corporation of portion of the site.

BERMONDSEY.—Tenders will shortly be invited for the construction of baths and washhouses on the Grange Road site.—Plans passed: rebuilding parish hall, Dilston Grove, for Clare College Mission; bottling store, Horsleydown Lane, for Messrs. Courage and Co., Ltd.; labour exchange, Swan Lane, for Ministry of Labour.

BEXHILL.—In their new Bill the Corporation are seeking powers to provide concert halls and other buildings for entertainment and recreation.—The Borough Surveyor has prepared a scheme for covering the Colonnade at a cost of £4,200.—It is proposed to acquire adjoining property at a cost of £2,100 with a view to future development in connection with the Town Hall.—Tenders are to be invited for the continuation of the East Parade improvement.

BRENTFORD.—The Urban District Council propose a scheme for the erection of 200 houses and for the fixing of the net freehold cost of houses under subsidy at £650.

BRIGHTON.—Fresh tenders are to be invited for the erection of eleven houses in Hereford Street, the decision that the Borough Surveyor should carry out the work by direct labour at a cost of £6,955 having been rescinded.—The Borough Surveyor has been asked to allow his architectural staff to concentrate on the preparation of a scheme for remodelling the Aquarium.—The Brighton West Pier Co. are to reconstruct the landing stage.—Six houses, Hollingdean Terrace, for Mr. A. Dockrell.

CITY OF LONDON.—The Court of Common Council are to erect tenements in Shepherdess Walk, Shoreditch, to rehouse persons displaced from City houses declared unfit for habitation.—The Canterbury Arms beerhouse in Fish Street Hill is to be rebuilt by Messrs. Whitbread and Co., Ltd.—Messrs. Courtlands, Ltd., are to erect a building on the east side of St. Martins-le-Grand, abutting on Foster Lane.—The premises of the Royal Mail Steam Packet Company in Lime Street are to be rebuilt.

CROYDON.—The Corporation are to construct a concrete wall in Whitehorse recreation ground at a cost of about £2,000.—A relief sewer is to be constructed at a cost of £20,000.—The Ministry of Health have now sanctioned the purchase of a site in Lower Addiscombe Road for the erection of public baths.—Another 200 housing subsidies are to be granted.—The Ministry of Health will not agree to a contract for 34 houses and 14 double tenements in Thornton Road, because the tender of £31,959 is above ruling prices, and suggested consideration of some alternative methods of construction.—Plans have been prepared for 112 houses on the Waddon estate and tenders are to be invited for brick and other methods of construction.—Selhurst Grammar School is to be enlarged at a cost of £2,700.—Sewage works extensions are recommended at a cost of £16,500.—Plans passed: 4 houses, Burlington Road, for Messrs. Jones and Keen; 5 houses, Nutfield Road, for Mr. F. H. Wilcocks; 5 houses, Pollards Crescent, for Messrs. Tysoe and Harris, 29 houses, Green Lane, for Messrs. Young and Macintosh; loco shed, East Croydon, for Messrs. G. Hall, Ltd.; 27 houses, Dunbar Avenue, for Messrs. Polden and Authers; 12 houses, Ross Road, for Mr. P. Richardson; 10 houses, Berne Road, for Mr. W. Cooper; alterations and additions, Moffat Road Church, for Mr. R. W. Carter.

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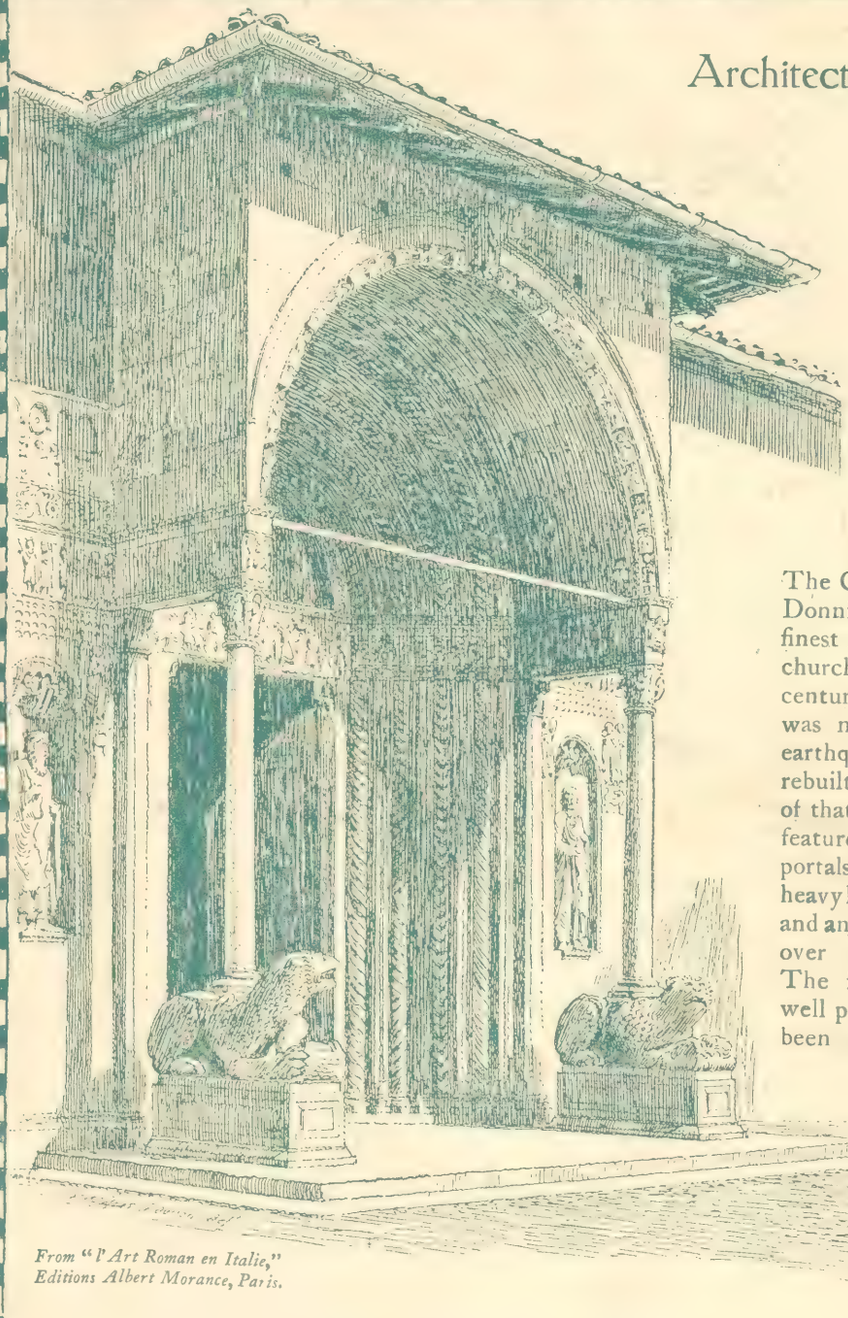

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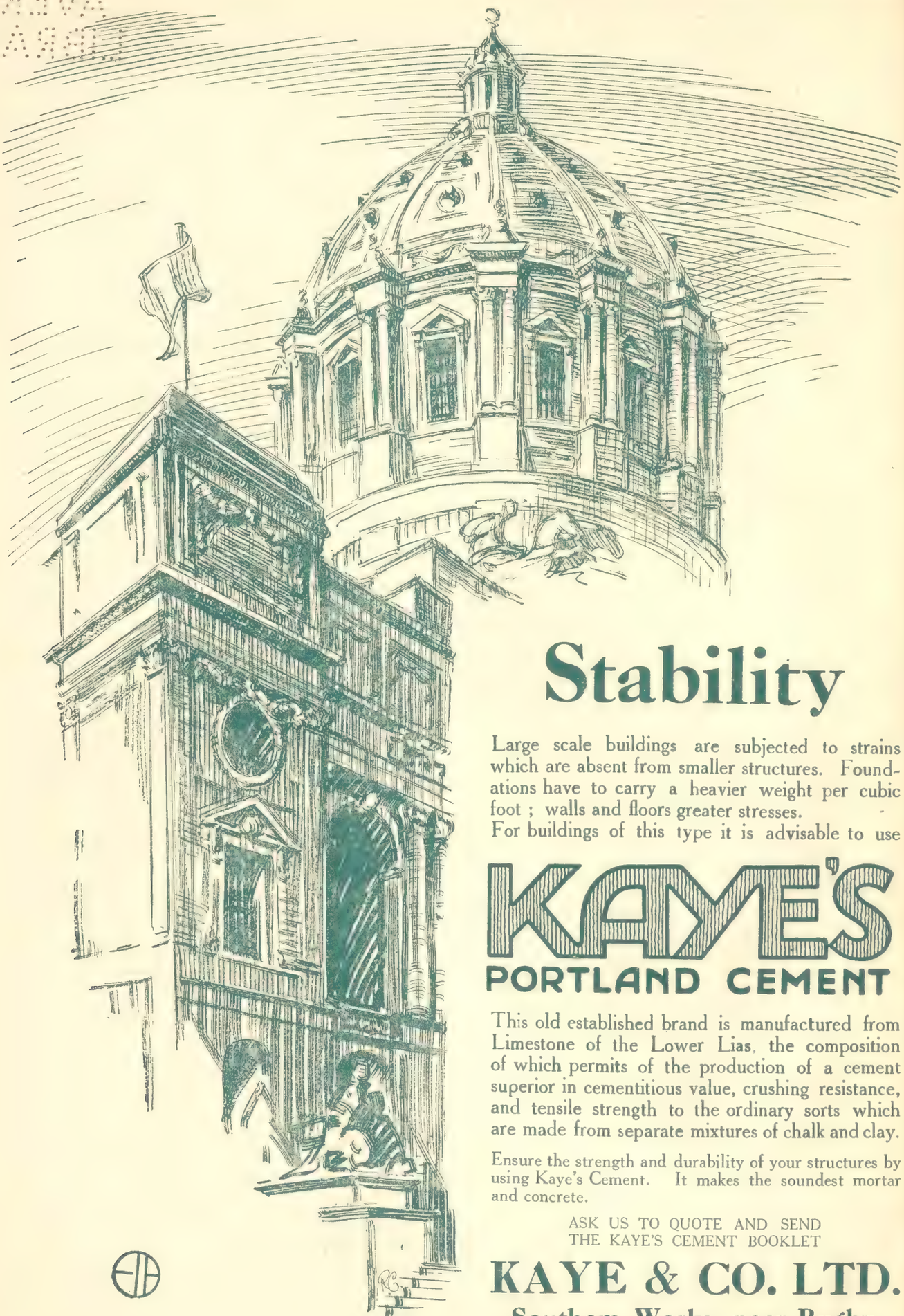

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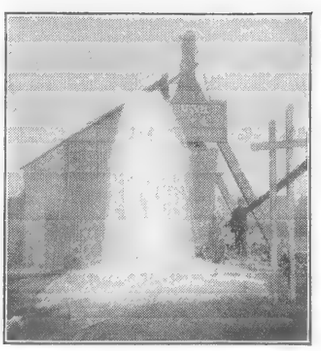

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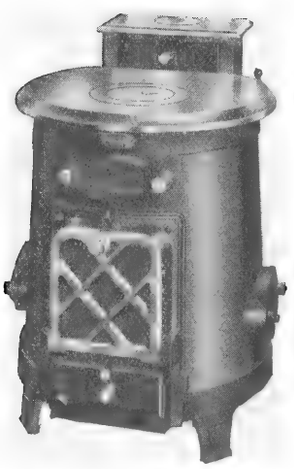

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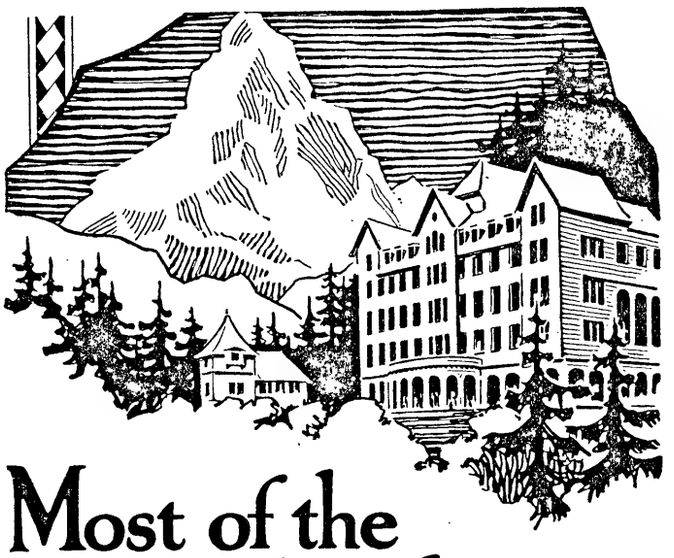

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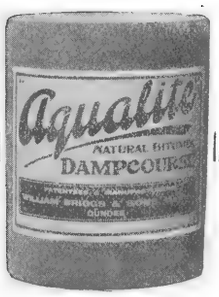

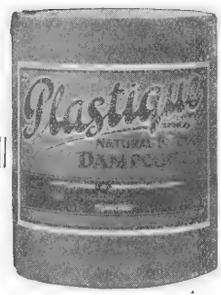

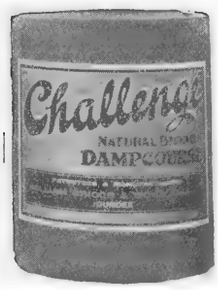

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The three well-known brands of Bitumen Dampcourse illustrated above are big in every sense—their quality—their value—their sales. There must be some sound reason for the fact that this year's demand promises to eclipse even that of the so-called boom years, and no doubt this will become apparent once you have investigated our samples and prices.

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Bitumen Specialists since 1865.

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G.E.C.

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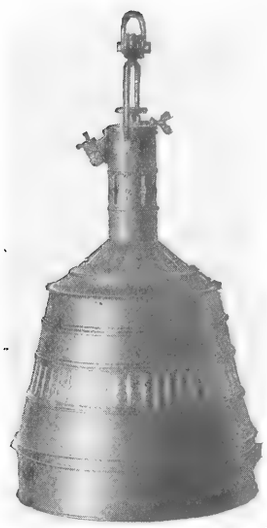

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- SPOTLIGHTS AND PROJECTORS, for use with Osram gas-filled projector-type lamp, ranging from 100 to 3,000 watt sizes.
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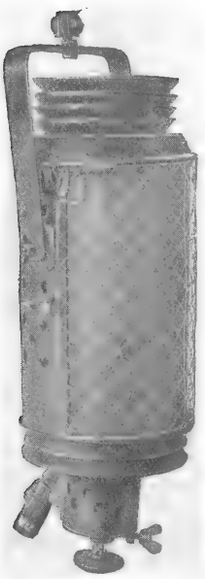
The G.E.C. Stage Lighting Service is at your disposal for the preparation of stage lighting schemes of any description.



Horizontal Colour Flood.

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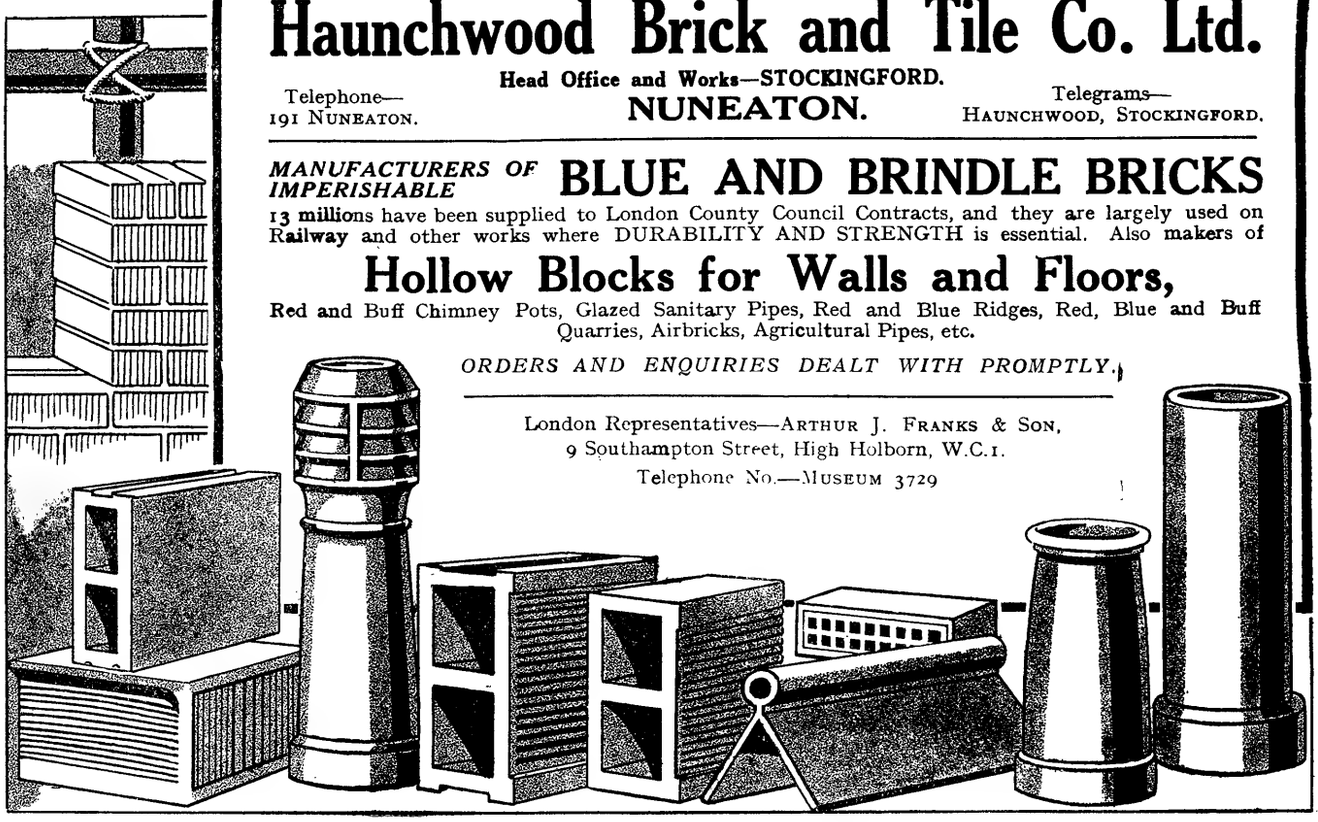

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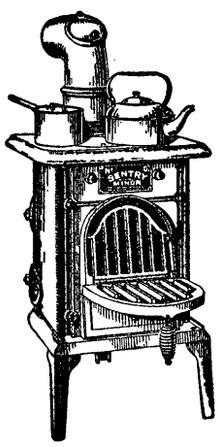
Made in Seven Sizes.
In CAST IRON, WROUGHT IRON or COPPER.



SENTRY MINOR No. 0 on base and legs

The SENTRY MINOR No. 0 from £9 10 0

Maximum output 3–20 gallon hot baths per hour. Suitable for Hot Water Storage of 25 or 30 gallons. Normal fuel consumption on continuous day and night working 1 ton for 4 months. A Towel Rail or small Radiator can be operated also if required.

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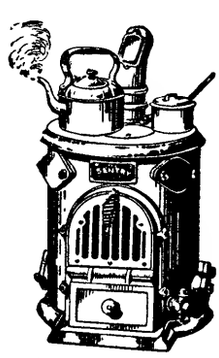
Maximum output 4–30 gallon baths per hour. Suitable for 40 or 50 gallon Storage. Normal fuel consumption on continuous working 1 ton for 3 months. Will supply up to 50 square feet of Radiation in addition to domestic supply if required.

Large Mica Window, Open Fire as required, ample Hot Plate for cooking. Burns coke, anthracite, patent fuels and all domestic refuse.



SENTRY No. 1

IMPORTANT In all sizes of SENTRY Boilers the waterway extends well below the fire bars. This is absolutely essential in any boiler used for Domestic Supply, as otherwise the boiler is rapidly destroyed through the deposit of sediment at the hottest part of the Boiler.

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R.A.A.

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In Greek Mythology the destiny of mortals was controlled by the three goddesses of fate—the Parcæ.

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Lachesis spun out man's destiny in the form of threads and controlled the actions of life and decided its length, whilst Atropos, the eldest of the three sisters, cut the thread of human life with a pair of scissors.

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"Achievement is but another milestone along the highway of Progress—the end of the journey lies ever beyond,"

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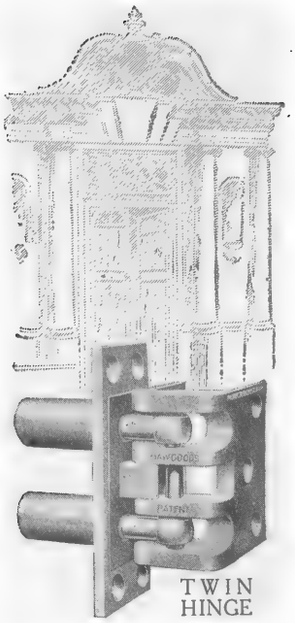

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For Kitchen and other Boilers. Prevents disastrous explosions. No leakage or corrosion.

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Fixed in the same position as ordinary Butt-Hinges, "Hawgood's" Reversible Spring Hinges eliminate the high cost entailed in fixing other types of spring hinge.

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TWIN HINGE.—Has 2 springs which are inserted in casement or post. Wings (which clip door and are not inserted) measure 3½ in. × 4 in. deep. Weight, about 5½ lb.

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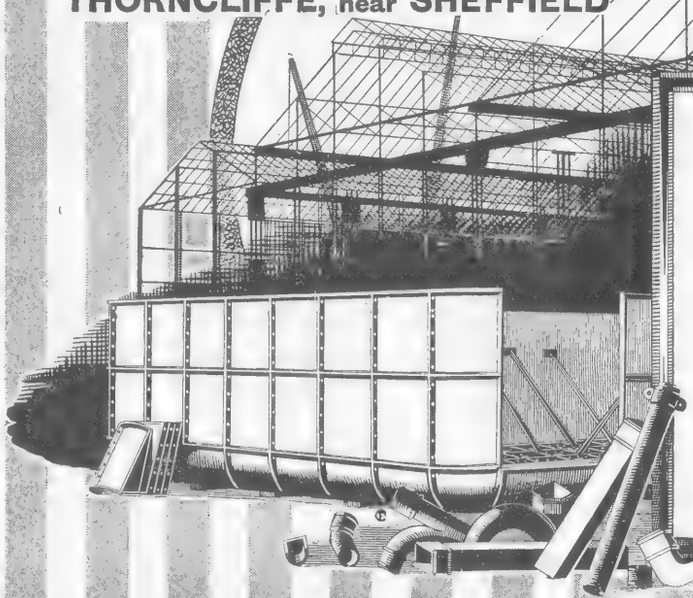

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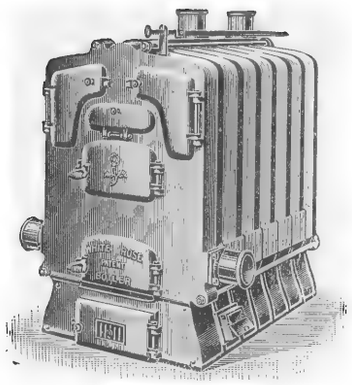
IN CAST IRON OR STEEL

BUILDERS' LIGHT CASTINGS

"WHITE ROSE"

SECTIONAL BOILERS

For Central Heating by Hot Water or Low Pressure Steam



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"White Rose" Boilers are also fitted with our spring-cupped washers for additional safety and endurance.

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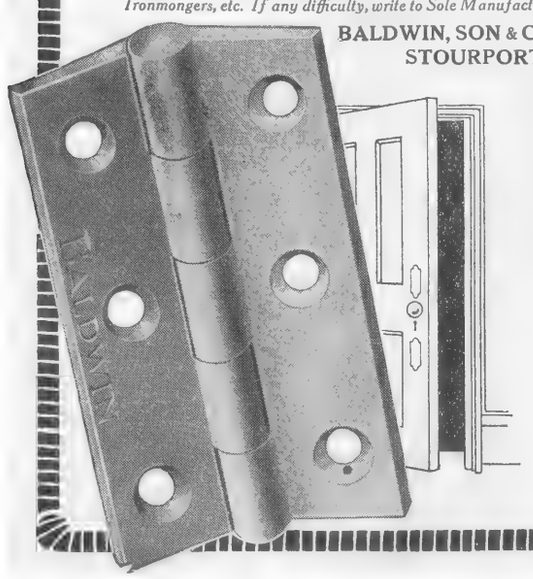

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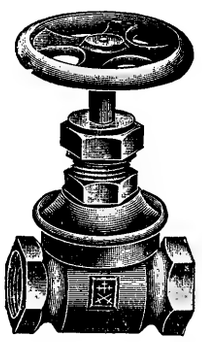

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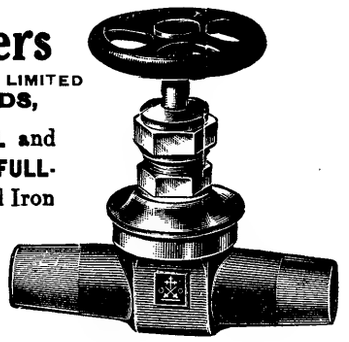

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Hot Plate, 34 ins. wide, accommodates six saucepans.

Boiler works a 50-gall. Tank or Cylinder OR 3 or 4 Radiators.

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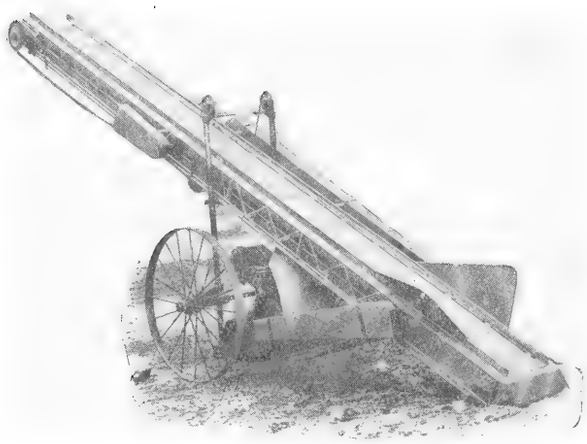

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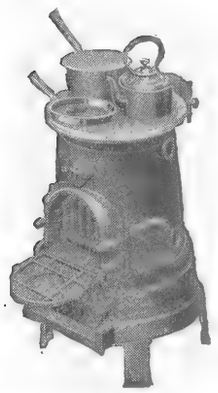

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LEAD GLAZING
METAL WINDOWS

"MORRIS HOUSE," ROCHESTER ROW, WESTMINSTER, S.W.1

CURRENT LONDON PRICES.

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These Prices apply to a New Building, costing from £1,000 upwards, and easy of access. They hold 10 per cent. in excess of the actual prime cost, without Establishment Charges.

PRELIMINARIES.

Allow for General Foreman, according to nature of contract, for duration of contract	From £5 10s. per week
Allow for Workmen's Compensation and Public Health Acts over whole amount of general building contract	1%
Allow for insurance against fire, ditto	½%
Allow for water, ditto	¼%
Allow for District Surveyor's Fees	
For a new building 400 square feet in area and two storeys high	45/0
Add for every additional 100 feet in area	3/9
Add for every additional storey in height	7/6
Add for inspection of fire exits, &c., under Amendment Act, 1905—the greater of these alternatives	½th of the above fees or £1 1s.
Allow for supervision of plastering	7/6
Allow for filling in trenches within three feet of a building	7/6
Allow for licences in respect of hoardings, &c., within the City of London, as Regulations	*say* £10
Ditto, for licences from Borough Councils	*say* £1
Allow for mess and material sheds, offices, &c.	from £50

	Per Foot Run
Hoarding complete	5/0
Planked gangway with handrail complete	4/0
Proper gantry complete	40/0
Sleeper roadways	8/0

	Per Foot Cube
Needling, strutting or shoring, including all labours and use and waste in erection and removal	5/0

DEMOLITION

	Per Ft. Super reduced—In small quantities	In considerable quantities
Pull down brickwork	6*d.*	2*d.*
Add, if in *very* small quantities not exceeding 21 ft.	3*d.*	
Add for filling baskets with *debris* and running same out to carts	1½*d.*	1½*d.*
Add if *debris* has to be raised or lowered to ground level	2*d.*	Usually dropped
Add for cartage when same costs 4/6 per 1½ yard load	2½*d.*	2½*d.*
Clean and stack old bricks	20/0 per thousand	
Hack off old plaster	1/0 per sq. yd.	

EXCAVATOR, CONCRETOR AND DRAINS

	Per Yard Cube—5 ft. deep	5 ft. to 10 ft. deep	Add if in trench
Excavate in common soil, wheel, fill carts and cart away	9/6	11/0	9*d.*
Planking and strutting	4*d.* per foot super.		
Planking, strutting and shoring	1/0	„	„

	1 to 6	1. 2. 4.	Hoisting
Portland cement and ballast	30/0	40/0	2/6
Concrete in foundations			
Add if in ground floors	2/0	2/10	2/6
Add if in beams or lintels	3/0	4/0	2/6

	Earthenware—4 in.	6 in.	Iron—4 in.	6 in.
Tested stoneware drains jointed in cement or standard iron drains jointed in lead, per foot run	1/8	2/6	2/7	3/11
Extra only for bends, each	2/6	3/6	11/6	20/0
Ditto, for junctions, each	3/0	4/3	19/0	35/0
Gullies, including concrete surround and iron grating, each	15/0	17/6	45/0	60/0

BRICKWORK (Exclusive of Pointing).

	Per Rod Reduced—Flettons	Stocks	Blues
Built in 1 to 3 lime mortar	561/-	725/-	1046/-
„ „ cement mortar	587/-	751/-	1072/-

Damp course	Per Foot Super.—Horizontal	Vertical
Two courses of slates in cement	10*d.*	1/3
½-in. asphalte	9*d.*	1/0

Facings	Per Foot Super.—Flemish bond	English bond
Allow for every 5s. additional cost of the facing bricks over the common brick basis	½*d.*	½*d.* plus 10%
Pointing (exclusive of scaffolding)		Per Ft. Super.
Weather joint in cement		2½*d.*
Flat joint in cement (struck) and lime whiting		1½*d.*

ARCHES.

Extra over common brickwork	Per Ft. Super.
In half-brick rings of bricks of same class as common brickwork	1/0
Add if of superior bricks for every 7/6 per thousand additional cost	1*d.*
In rubbed and gauged arches with fine joints	6/0
Quoins, angles, copings and sills of superior bricks	Per Ft. Run
Allow for every 5s. per thousand additional cost of bricks over the common basis price	½*d.* plus 10%
Dentils-tile creasing and cement fillets and pointing to 9-in. wall	1/2

PAVIOR.

	Per Yard Super.—1in.	1½in.	1½in.	2in.	3in.
Cement and sand	3/0	3/5	3/10	4/8	—
Granolithic	4/2	4/9	5/3	6/4	—
Asphalte	8/0	—	—	—	—
Tarmac	—	—	—	4/8	6/6

MASON.

	Per Foot Cube—Templates	Thresholds	Sills
York stone and all labours and mortar in hoisting and fixing	12/6	16/6	22/6
	Stairs		
Artificial stone	9/0	8/0	11/0
	To Elevation generally		
Portland stone and all labours of usual character	20/6		
Bath stone ditto	10/6		

CARPENTER.

Flat boarded centreing, per yard super.	5/0
Centreing to beams, per yard super.	7/6
Centres to arches, per foot super.	2/0

	Plates	Floor	Roofs	Trusses
Fir framed in carpenter's work per ft. cube	4/0	6/0	5/10	8/9

At per square	¾in.	1in.	1¼in.
Deal close boarding	31/0	38/0	48/0
Battening for slates	10/0	11/0	12/0
Roofing felt lapped and laid	12/0 to 20/0		

Gutter boards and bearers per foot super.	1/0

JOINER.

Per square	¾in.	¼in.	1in.	1¼in.
Deal plain-edged flooring	—	33/0	40/0	50/0
Deal tongued and grooved flooring	—	37/0	45/0	56/0
Deal matching	36/0	43/0	46/6	58/6

	1¼ in.	2 in.
Sashes, per foot super.		
Deal moulded sashes, divided in squares	1/10	2/0

Windows, per foot super.	Very Small	Small	Normal	Large
Deal cased frames, 1in. linings, 1¼in. pulley styles, 2in. sashes in squares, oak sill, double hung with pulleys, lines and weights	11/0	5/0	3/6	3/0

	1¼in.—2 Panel	4 Panel	2in.—4 Panel	6 Panel
Doors, per foot super.				
Square frame both sides doors	2/0	2/3	2/5	2/8
Add for each side moulded	2½*d.*	3½*d.*	4*d.*	4½*d.*
Add for each side bead butt	4*d.*	4*d.*	4½*d.*	5*d.*

Doors of hardwood, such as oak or mahogany, will cost three times as much exclusive of polishing.

Staircase.	
1¼ Deal tread, 1in. riser, fixed complete per foot super.	2/6
2in. Deal strings, per foot super.	2/0
Housing steps to strings, each	9*d.*

	Per Foot Cube—Very Small	Small	Large
Mahogany French-polished handrail	87/0	69/0	53/0
Add if ramped	120/0	100/0	80/0
Add if wreathed	240/0	200/0	160/0

	1¼in.	1½in.
Deal balusters, housed each end, each	1/3	1/5

	3 by 3	3½ by 3½	4 by 4
Deal newels, per foot run	1/2	1/6	1/9

Deal Super. Sundries	1in.	1¼in.	1½in.
Deal shelves or divisions	1/0	1/2	1/4
Deal shelves cross-tongued	1/2	1/4	1/6

Shelves, in oak or mahogany = 3 times value of deal, exclusive of polishing.

Deal skirtings, moulded and backings and grounds	1/4	1/6	1/8
Deal jamb linings, rebated and framed and backings	1/5	1/7	1/9

Skirtings and linings, in oak or mahogany—2½ times value of deal, exclusive of polishing.

Fillets, rails and frames. Per foot run	Sectional Area—1in.	2in.	4in.	6in.	9in.	12in.	14in.	16in.
Deal, wrot and fixed	2*d.*	3*d.*	4½*d.*	5½*d.*	8*d.*	10½*d.*	11½*d.*	1/1½
Deal, wrot, fixed and moulded	2½*d.*	3½*d.*	5*d.*	6½*d.*	9*d.*	11½*d.*	1/0½	1/2½
Deal, wrot, moulded, rebated, framed and fixed	—	—	6½*d.*	8*d.*	10*d.*	1/0½	1/1½	1/3½

Fillets, mouldings and frames in oak or mahogany will cost 3 times their value in deal, exclusive of polishing.

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CURRENT LONDON PRICES—*Continued.*

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JOINER—*Continued.*

	Groove or Bead	Staff Bead or Nosing	Moulding per lin. Girth	Rounded Heel or Hollow or Plugging
	Per Foot Run			
Labour only to	½d.	1d.	½d.	2d.

Labour and Screws only Fixing									
Barrel Bolts	Flush Bolts	Sash Fasteners	Locks and Furniture: Rim	Mortice	Cupboard	Casement Stays	Fasteners	Grip Handles	Spring Catches
1/0	2/0	1/0	2/0	4/0	1/3	1/0	1/0	1/0	1/0

PLUMBER.

	Per cwt.		
	Soakers	Flats	Flashings and Gutters
Milled lead and laying	63/6	70/9	74/0

Per Foot Run			Each		
Copper Nailing 4d.	Soldered Angle 2/0	Welted Joint 4d.	Bossed Ends to Rolls 6d.	Cesspools 5/6	Soldered Dots 2/0

Per Foot Run	½in.	¾in.	1in.	1¼in.	1½in.	2in.	3½in.	4in.
Lead service	1/8	2/3	2/10	3/8	4/0	5/2	—	—
Lead waste	1/1½	1/7	2/0	2/4	2/8½	3/6	—	—
Lead soil	—	—	—	—	—	—	6/4	6/11

Each								
Egg Joints	2/3	2/6	2/9	3/0	3/3	3/9	6/0	6/6
Branch joints	2/6	2/9	3/0	3/3	3/6	4/0	6/6	7/0
Indiarubber joints ..	—	—	—	3/0	3/0	—	—	—
Stop ends	9d.	1/0	1/3	1/9	2/0	2/6	—	—
Bends	—	—	—	—	2/0	2/6	5/6	6/3
Beaded ends	—	—	—	10d.	10d.	1/0	—	—
Single tacks	—	—	11d.	1/0	1/1	1/5	2/0	2/3
Double tacks	—	—	1/2	1/3	1/4	1/8	2/7	3/1
Brass sleeves	—	—	—	—	7/3	8/8	13/2	14/8
Lead traps	—	—	—	8/9	9/10	12/8	22/6	26/1
Boiler screws	3/2	3/9	4/10	6/7	8/3	—	—	—
Bib cocks	7/0	9/6	13/6	—	—	—	—	—
Stop cocks	9/9	12/3	17/3	30/0	44/0	100/0	—	—
Ball cocks	8/0	10/0	16/6	30/0	42/0	92/6	—	—
Wire balloons	—	—	—	—	—	9d.	—	1/3

	Per Foot Run 2in.	4in.
Iron (L.C.C.) pipes		
Soil, vent, waste and anti-syphon pipes, coated lead caulked joints	2/0	3/0
Extra for bends .. .. each	7/5	11/2
Extra for junctions .. .. each	11/11	18/4

SLATER AND TILER.

ROOFING	Per Square Countess	Ladies
Welsh slating laid to a 2½in. lap with two composition nails to each slate	80/0	72/0
Add for every ¼in. additional lap	2/3	3/7
Add for copper nails	2/3	3/4

Best selected green Westmorland slates laid to a 3in. lap, with copper nails	132/0
Asbestos slates laid to a 3in. lap, with compo. nails	41/0
Asbestos corrugated roofing with galv. screws and limpet washers ..	60/0
Plain red roof tiling 4in. gauge, each tile in every fourth course nailed with two galv. iron nails	70/0
Add for vertical work	2/6
Add for circular on face in elevation	25%
Add for circular on plan, according to radius	40%
Add for circular on face in elevation and also on plan according to radius	66⅔%

	Per Foot Run
Cuttings—Eaves	Equal 1 foot super.
Edges and abutments	Equal ½ foot super.
Ridge tiling	2/0
Fixing soakers	7d. per dozen

SMITH AND FOUNDER.

	Per Cwt. Up to 1st Floor	Above 1st Floor
Rolled steel joists	16/6	18/6
Compound girders	19/6	21/6
Stanchions	21/6	23/6
Cast-iron columns	16/6	18/6

	Light	Medium	Heavy
Steel roof trusses	32/6	30/0	27/6
Chimney bars	36/0	34/0	32/0
Tie rods and ring bolts	47/6	45/0	42/6
Bolts and nuts	45/0	40/0	35/0
Handrail and balusters	55/0	50/0	48/0
Steel reinforcing bars bent and fixed	22/0	21/6	21/0

Rain-water Goods	Per Foot Run 2in.	3in.	4in.
Pipes fixed with pipe nails	11d.	1/1	1/6
Bends or shoes, each	1/6	2/0	2/9
Junctions, each	2/3	3/0	4/0
	4in.	5in.	6in.
Gutters fixed with brackets	1/2½	1/6	1/10
Outlets and angles	1/9	2/6	3/1
Stop ends	10d.	1/0	1/1

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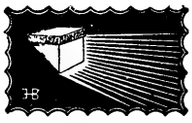
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GAS AND STEAM PIPES.

	Per Foot Run							
	Gas		Steam Tubing					
	¼in.	⅜in.	¼in.	⅜in.	1in.	1¼in.	1½in.	2in.
Tubes and all fittings fixed with clips complete ..	10*d.*	10½*d.*	1/1	1/4	1/8	2/1	2/5	3/2

PLASTERER

On Walls and Ceilings	Per Yard Super	Narrow Widths per Foot Super	Per Foot Run Rounded Arris	Angle	Quirk	Flush or Staff Bead
Render, float and set in lime and hair ..	2/6	0/5	0/2	0/3	0/1½	0/8
Do. do. Siripite	2/9	0/5½	0/2	0/3	0/1½	0/8
Do. do. Portland ..	3/7	0/7	0/2½	0/3½	0/2	0/9
Do. do. Keene's ..	4/0	0/8	0/2½	0/3½	0/2	0/9
Sawn lathing	1/5	0/3	—	—	—	—
Metal lathing	1/10	0 3½	—	—	—	—
Screeding in Portland	2/1	0 4¼	—	—	—	—

Per Foot Run	Per 1in. Girth	Mitres	Stop Ends
Moulding in plaster	0/2	Equal to Value of 1 foot of moulding	Equal to ⅓rd of a foot of moulding
Do. do. Portland ..	0/3		
Do. do. fibrous	0/3		

Partitions	Per Yard Super. 2in.	2½in.	3in.
Concrete slab partition fixed ready for plastering ..	5/0	5/6	6/0

GLAZING.

	Per Foot Super. Up to 10ft.	From 25 to 50ft.	From 50 to 100ft.
Ordinary plate glass glazed	4/1½	4/5	5/0½

Sheet Glass, glazed complete, per foot super.

Sheet Glass 21oz.	15oz.	Figured Rolled	⅛in. Rolled	Cast Glass 3/16in.	¼in.	⅛in. Wired Cast Glass	Metal bar Patent Glazing
0/7¾	0 5¾	0 10½	0/7¾	0/9¼	0/9½	1/1¼	2 0

PAINTER AND DECORATOR.

Washable Distemper	Per Yard Super. Wash and Stop	Once Distemper	Twice Distemper	Stipple
In common colours	0/3½	0/5	0/9	0/2
In carmine or ivy green or similar	0/3½	0/5½	0/10	0/2
In scarlet, ivy green, or similar ..	0/3½	0/7	1/1	0/2

Add per Yard Super. for the following: If on Moulded Work 100%	If on Enriched Work 300%	If in Small Panels	Party Colours on Medium Panels	Large Panels	If on Narrow Widths
		0/3	0/2	0/1	0/3

PAINTING.

	Knot, Stop and Prime	Paint Coats 1	2	3	4	Stain	Size	Varnish	Enamel
Plain painting on surface in common colours, per yard super	0/8	0/7¾	1/2½	1/8¾	2/3	0/6	0/2	0/9	1/0
Do., on frames each ..	0/8	0/8	1/4	2/0	2/6	0/8	0/3	0/10	1/1
Do., on large do., each	0/10	0/10	1/8	2/6	3/2	0/10	0/4	1/1	1/5
Do., on squares, per doz.	0/8	1/0	2/0	2/8	3/4	1/0	0/4	1/3	1/8
Do., on large do., do.	1/0	1/6	3/0	4/0	5/0	1/6	0/6	1/10	2/6
On small pipes or narrow bands, per foot run	0/0½	0/0½	0/1	0/1½	0/1¾	0/0¾	0/0½	0/0¾	0/0¾
On large pipes or do. do.	0/1	0/1	0/2	0/3	0/3½	0/0¾	0/0½	0/1¼	0/1¾

Add to the above prices for the following per yard super:—
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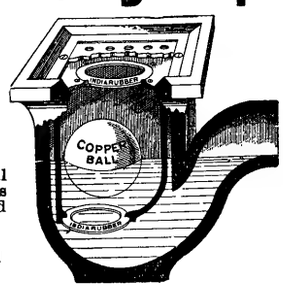

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CLASS OF WORKMEN AND RATE PAYABLE PER HOUR.

DATE OF VARIATION	MECHANIC	PAINTER	LABOURER	NOTES AS TO RATE PAID TO SPECIAL WORKMEN	
1914–Aug.	11½*d.*	9*d.*	8*d.*	Granite Mason, Fixing Mason, Spindle Machin't Four Cutter, ditto	*Add* 1*d.* to Mechanic's Rate
1916–July	1/0½	10*d.*	9*d.*		
1917–Apl. 23	1/1½	11*d.*	10*d.*		
1917–Oct. 20	1/3½	1/0½	11½*d.*		
1918–Jan. 11	1/3½+12½%	1/0½+12½%	11½+12½%	Plumber *previous* to 26 May 1923 *only*	*Add* ½*d.* to Mechanic's Rate
1918–July 27	1/5 +12½%	1/2½+12½%	1/1½+12½%		
1919–Feb. 15	1/9	1/6	1/5	Scaffolders, Timberman, Bender and Fixer of Reinforcement	*Add* 1*d.* to Labourer's Rate
1919–May 3	1/9	1/8	1/5		
1919 Nov. 15	1/11½	1/10½	1/8		
1920–May 1	2/0½	1/11½	1/9		
1920–May 29	2/4	2/3	2/1		
1921–May 16	2/2	2/1	1/11	For working in waterboots or cold storage or artificial atmosphere or from boats	*Add* 1*d.* to the workman's class rate
1921–July 1	2/2	2/1	1/10		
1921–Aug. 1	2/1	2/0	1/9		
1921–Sept. 1	2/0½	1/11½	1/7½		
1922–Feb. 1	2/0	1/11	1/7		
1922–April 1	1/10	1/9	1/5		
1922–June 1	1/8	1/7	1/3		
1923–May 26	1/7½	1/6½	1/2½		
1924–Feb. 1	1/8	1/7	1/3		
1924-Aug. 25	1/8½	1/7½	1/3½		
1924-Oct. 25	1/9½	1/8½	1/4½		

All men working on night gangs, *add* 3*d.* per hour.

Prices of Building Material in London.

	ITEM.	CLASS.	COST.	UNIT.
A	Antisyphonage	Pipes, iron, 2″	3/0	Per yard
	Asbestos	Sheeting	1/8	Ditto
	Ditto	Ditto, corrugated	3/4	Ditto
	Aluminium	Paint	25/0	Per gallon
B	Ballast	Thames (2″: 10/0; 2½″: 12/9)		Per yard cube delivered
	Ditto	Pit (2″: 10/0; 2½″: 12/9)		
	Ball valves	Brass (½″: 5/6; ¾″: 7/9; 1″: 13/4)		each
	Brick	Broken	11/6	Per yard cube d/d
	Ditto	Hardcore	5/0	
	Bricks	Blue, wirecuts	145/0	Per 1,000 F.O.R. London
	Ditto	Ditto, pressed	185/0	
	Ditto	Firebricks	203/0	
	Ditto	Fixing, breeze	80/0	
	Ditto	Flettons	53/3	
	Ditto	Reds	110/0	
	Ditto	Rubbers	244/0	
	Ditto	Stocks	95/0	Delivered F.O.R. London
	Ditto	White	100/0	
	Ditto	White glazed Stretchers	460/0	Per 1,000 F.O.R. London
	Ditto	Ditto, headers	450/0	
	Ditto	2nd quality	20/0	Per 1,000 less
	Breeze	Coke	10/6	Per yard cube d/d
	Ditto	Pan	5/6	
C	Cartage	Of Bricks, blue	12/6	Per 1,000 from rail to job.
	Ditto	Of ditto, Flettons	9/0	
	Ditto	Of ditto, glazed	15/0	
	Cement	Keenes	105/0	Per ton delivered
	Ditto	Portland	58/0	
	Ditto	White, ditto	312/0	
	Copper	Nails	1/4	Per lb.
	Ditto	Sheeting (½″: 1/0; ¾″: 1/0; 1″: 1/0)		Ditto
	Cocks	Bib, brass, stamped (½″: 4/0; ¾″: 6/0; 1″: 9/0)		Each
	Ditto	Stop, brass, stamped (½″: 4/6; ¾″: 6/6; 1″: 10/6)		Ditto
D	Drains, stoneware	Pipes and Fittings Standard list	−20%	F.O.R. London
	Ditto	Ditto	+10%	Delivered
	Drains, iron	Pipes (4″: 5/6; 6″: 8/7)		Per yard delivered
	Driers	For paint	36/0	Per cwt.
E	Enamel	White, best	25/0	Ditto, per gallon
F	Felt	Roofing	9/10	Delivered, per square
	Fireclay	Stourbridge	2/3	Ditto, per cwt.
	Flooring	Deal, P.E. (1″: 26/0; 1½″: 33/0)		Per square delivered
	Ditto	Ditto, G. & T. (1″: 27/0; 1½″: 34/0)		
G	Gas	Tubes, Standard list	−47½%	Delivered
	Ditto	Fittings, ditto	−47½%	Ditto
	Ditto	Tubes, galvanised	−32½%	Ditto
	Glass cut to sizes	Plate not exceeding 1 foot sup.	1/6	Per foot super at Merchant's depot
	Ditto	Ditto 3 ditto	2/6½	
	Ditto	Ditto 5 ditto	3/2	
	Ditto	Ditto 7 ditto	3/6	
	Ditto	Ditto 10 ditto	3/7	
	Ditto	Ditto 25 ditto	3/10	
	Ditto	Ditto 100 ditto	4/5	
	Ditto	Sheet, 15 oz.	3¾*d.*	
	Ditto	Ditto 21 oz.	5⅜*d.*	
	Ditto	Ditto 26 oz.	7½*d.*	
	Ditto	Rough cast ½″	6½*d.*	
	Ditto	Wired, cast	10*d.*	
	Ditto	Figured, rolled	7⅜*d.*	
	Ditto	Flemish or Arctic	7¾*d.*	
	Ditto	Lead lights in plain sheet squares	2/0	
	Gold leaf	English	2/9	Per book
	Gold size	Best	12/6	Per gallon
	Granite	Chippings	32/6	Delivered, per yard
	Ditto	Ditto	26/0	Per ton

Prices of Building Material in London—*Continued*

	ITEM.	CLASS.	COST.	UNIT.
H	Hire	Horse, cart and man	25/0	Per day
	Ditto	Lorry and driver	60/0	Ditto
	Ditto	Steam roller / Water cart and men	100/0	Ditto
	Ditto	Sacks	3*d.*	Each
	Hot water	Tubes, Standard list	−42½%	Delivered
	Ditto	Fittings, ditto	−42½%	Ditto
	Ditto	Tubes, galvanised	−26½%	Ditto
J	Joists	Steel, rolled	260/0	Per ton delivered
	Ditto	Wood, soft, 9″×3″	3/2	Per foot cube delivered
	Ditto	Ditto, ditto, 7″×2½″	3/0	
	Ditto	Ditto, ditto, 6″×2″	2/8	
K	Knotting		19/0	Per gallon
L	Lathing	Metal	1/0	Per yard
	Ditto	Wood, sawn	2/9	Per bundle
	Lead	Sheet	51/6	Per cwt.
	Ditto	Pipe	52/0	Ditto
	Ditto	Soil	55/0	Ditto
	Ditto	White	59/0	Ditto
	Lime	Grey stone	51/3	Per ton
	Ditto	Blue lias	58/6	Ditto
M	Mahogany	Honduras	19/0	Ft. cube
	Ditto	Cuba	26/0	Ditto
	Matching	Deal, T. G. & B. (½″: 17/6; ¾″: 22/0; 1″: 26/0)		Per square delivered
N	Nails	Brads, floor	22/9	Per cwt. delivered
	Ditto	Cut clasp	23/0	
	Ditto	Lath	31/0	
	Ditto	Wire, oval	26/0	
O	Oak	American	14/0	Per foot cube delivered
	Ditto	English	13/0	
	Ditto	European	21/0	
	Ditto	Japanese	20/0	
	Oil	Linseed, boiled	4/3	Per gall.
	Ditto	Ditto, raw	3/11	ditto
P	Paint	Mixed (2″: 81/3; 3″: —)		Per cwt. d/d
	Partitions	Breeze	2/1 2/11	Per yard sup. d/d
	Plaster	Paris, coarse	70/0	Per ton delivered
	Ditto	Strapite	70/0	
	Ditto	Slabs, ceiling	2/3	Per yard
	Putty	Glazing	16/0	Per cwt.
R	Rain water	Gutters, O.G. (5″: 2/2; 6″: 2/8)		Per yard d/d
	Ditto	Pipes, round (3″: 2/2; 4″: 3/0)		
	Roofing, iron	Corrugated, galvd.	21/0	Per cwt.
S	Sand	Ordinary	13/0	Per yard cube d/d
	Ditto	Washed	14/0	
			No. 8 / No. 10	
	Sash	Lines, flax	3/8 / 4/6	Per knot
	Ditto	Weights, iron	12/0	Per cwt.
	Ditto	Ditto, lead	40/0	Ditto
	Size	Best	5/6	Per fkn.
	Slates	20″×10″, Welsh	430/0	Per 1,000
	Ditto	14″×9″, ditto	167/0	Ditto
	Soil pipes	L.C.C., iron, 4″	5/1	Per yard
	Solder	Plumbers'	1/0	Per lb.
	Steam	Tubes, Standard list	−37½%	Delivered
	Ditto	Fittings, ditto	−37½%	Ditto
	Ditto	Tubes, galvanised	−20%	Ditto
	Steel	Angles	14/6	Per cwt.
	Ditto	Bolts	36/0	Ditto
	Ditto	Joist	13/0	Ditto
	Ditto	Stanchions	17/6	Ditto
	Stone	Bath	3/8	Per foot cube d/d
	Ditto	Portland	5/3	
	Ditto	York	6/3	
T	Tar	Stockholm	1/0	Per gallon
	Teak	Eng.	10/0	Per foot cube d/d
	Ditto	Moulmein	14/0	
	Terebine		9/0	Per gallon
			2″ / 4″	
	Thimbles	Brass, Plumbers'	2/0 / 3/8	Each
	Tiles	Plain, roofing	120/0	Per 1,000
	Ditto	6″×6″, white glazed	12/6	Per yard
	Timber	Deal, joinery	5/9	Per foot cube d/d
	Ditto	Ditto, Carpenters'	3/0	
	Ditto	Slating battens	2/6	Per 100 feet
			1½″ / 2″	
	Traps	Cast, lead, S.	3/0 / 4/3	Each
	Ditto	Ditto, P.	2/4 / 3/5	Ditto
	Turpentine		5/6	Per gallon
U	Unions	Plumbers' (½″: 1/2; ¾″: 1/6; 1″: 2/3)		Each
V	Valves	Ball (½″: 4/6; ¾″: 6/3; 1″: 12/0)		Each
	Varnish	Hard, oak	15/0	Per gallon
	Ditto	Copal	17/0	Ditto
	Ditto	Flat	16/0	Ditto
W	Whiting	Gilders'	3/0	Per cwt.
	Wire	Guards, galvd.	2/6	Per foot super.
			2″ / 4″	
	Ditto	Balloon, ditto, ditto	5*d.* / 6*d.*	Each
	Ditto	Ditto, ditto, copper	1/0 / 1/4	Ditto
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Form of Tender, Stipulations, and Conditions of Contract, together with Lay-out Plans, etc., and Specifications, may be obtained at the office of the undersigned on and after the 15th December.
Tenders, sealed, and endorsed "Tenders for the Erection of Houses at North Prospect," together with all documents, etc., must be delivered to the Town Clerk, Municipal Offices, Plymouth, not later than 10 a.m. on the 2nd January, 1925.
A deposit of Five Guineas will be required; such deposit will be refunded on receipt of a bona fide Tender and the return of all drawings and documents.
The Council does not bind itself to accept the lowest or any Tender.
J. WIBBERLEY,
Borough Engineer and Surveyor.
Municipal Offices,
Plymouth,
9th December, 1924.

LONG EATON URBAN DISTRICT COUNCIL.

RECONSTRUCTION OF COCKAYNE'S BRIDGE AND APPROACHES.

THE above Council invite TENDERS from Contractors for a BRIDGE RECONSTRUCTION in Ferro-concrete (Indented Bar System) and APPROACHES. The new Bridge will be 50 feet wide and 21¼ feet span.
Conditions, Specification and Quantities may be obtained and the Plans inspected at The Hall, Long Eaton, on deposit of Five Guineas, which will be returned on receipt of a bona-fide Tender, not subsequently withdrawn, and the return of all documents.
Sealed Tenders, endorsed "Cockayne's Bridge," to be delivered to the undersigned not later than Noon on the 9th day of JANUARY, 1925.
The Council will only consider Tenders from Contractors having experience in reinforced concrete work, and do not bind themselves to accept the lowest or any Tender.
H. RAVEN,
Engineer.
The Hall, Long Eaton,
6th December, 1924.

PUBLIC HEALTH ACT, 1875.
RURAL DISTRICT OF ST. ALBANS.
LONDON COLNEY MAIN DRAINAGE.

THE RURAL DISTRICT COUNCIL of ST. ALBANS, acting as the Sanitary Authority for the said District, are prepared to receive TENDERS for the MAIN DRAINAGE of London Colney. The Work consists of Sewers, Manholes, Outfall Works, Ejector Chambers, Engine House, etc.
Particulars and Specification may be obtained at the Offices of the Consulting Engineers, Messrs. HOWARD HUMPHREYS AND SONS, 28 Victoria Street, Westminster, on and from Friday, the 19th of December, 1924, until Friday, the 2nd January, 1925, between the hours of 10 a.m. and 4 p.m., upon payment of a deposit of Three Guineas, which deposit will be returned upon receipt of a bona-fide Tender which is not subsequently withdrawn by the Contractor.
The successful Tenderer will be required to execute a Contract Deed, the draft of which may be seen at the Offices of the Consulting Engineers when the Drawings are inspected.
Tenders must be on the official form, each Tender in a sealed envelope marked "Tender for London Colney Main Drainage." Tenders must be accompanied by the General Conditions and Specification as issued by the Consulting Engineers.
Each Tender must be signed in the handwriting of the Tenderer or his authorised Agent.
The Council does not bind itself to accept the lowest or any Tender.
Tenders must reach the undersigned by 9 a.m. on FRIDAY, the 16th of January, 1925.
Given under my hand the 8th day of December, 1924.
E. F. W. HIEATT,
Clerk to the Rural District of St. Albans.
Union Offices,
St. Albans, Herts.

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100 HOUSES on the Meanwood Estate.
The Plans and General Conditions of Contract may be seen, and Form of Tender with Specification obtained, at the office of the undersigned, on and after Wednesday, December 10, 1924.
A deposit of £1 1s. will be required, which will be returned on receipt of a bona-fide tender. Cheques should be made payable to the "Leeds Corporation."
Tenders, properly endorsed, must be received at the Town Clerks' office, Great George Street, Leeds, not later than 10 a.m. on Monday, December 29, 1924.
Contractors may tender for all or any number of these houses.
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W. T. LANCASHIRE,
City Engineer
Municipal Buildings, Leeds.
December 4, 1924.

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In consequence of the necessity of closing pages for press on Wednesday, all fresh copy where proofs are required must reach this office by the Friday preceding publication, where no proof is required by Tuesday 5 o'clock.

COMPETITIONS

COUNTY BOROUGH OF MIDDLESBROUGH EDUCATION COMMITTEE.

ARCHITECTURAL COMPETITION.

THE CONSTANTINE TECHNICAL COLLEGE.

COMPETITIVE DESIGNS are invited for the above College. The Governing Council have appointed Mr. Percy Thomas, F.R.I.B.A. (Cardiff) to act as Assessor in the Competition. A copy of the Instructions to Architects (as approved by the R.I.B.A.), Schedule of Accommodation, Plan of Site, etc., may be obtained on application to the undersigned on payment of a deposit of One Guinea, which will be returned on receipt of a bona fide design, or upon the return of the Instructions, etc., within two weeks of the issue of Replies to questions.

Applications for copies of the Instructions, etc., must be received on or before Saturday, December 27, 1924.

THOS. BOYCE,
Director and Secretary.

Education Offices,
Woodlands Road, Middlesbrough.
December 9, 1924.

WAR MEMORIAL.

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Conditions of the competition and instructions, with a plan of the site, can be obtained on application to the undersigned at 26, Great George Street, Leeds, on payment of one guinea, which will be returned to the applicant in the event of a *bona fide* design being received from him. Dated this 21st day of November, 1924.

THOS. THORNTON.
Town Clerk.

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WANTED, Architect as PARTNER by Consulting Structural Engineer, M.I.Struct.E. Established in London. Capital immaterial, but must have good connection.—Box 171, Office of "The Architect."

NOTICES.

BOROUGH OF PORTSMOUTH.

ERECTION OF PUBLIC ABATTOIR.

WITH a view to selecting an expert for designing and supervising the erection of a proposed PUBLIC ABATTOIR, the Portsmouth Corporation invite Architects with experience in work of this nature to forward to the undersigned not later than the fourteenth day of January, 1925, the following particulars:

(1) Full details of architectural and engineering qualifications.
(2) Particulars of experience in designing and supervising the erection of Abattoirs, giving particulars and situation of any works carried out.
(3) The scale of remuneration required in the event of being selected.

F. J. SPARKS,
Town Clerk.

Town Hall,
Portsmouth.
December 15, 1924.

SITUATIONS VACANT

DRAUGHTSMAN DESIGNER wanted immediately by London firm of electric sign manufacturers.—Apply, in first instance, stating salary required.—Box 8327, "The Architect."

ARCHITECT'S ASSISTANT required. Must be well up in Construction, and have had good experience. Write Box 338, SAMSON CLARK & CO., LTD., 57 Mortimer Street, W.1.

REPRESENTATIVES required by London Firm supplying Jointless Flooring, Terrazzo Paving, Stairs, Partitions, etc. Connection with first-class Architects and Contractors essential. Full particulars of past experience and references to Box 172, Office of "The Architect," Imperial Buildings, E.C.4.

SITUATIONS WANTED

WANTED by Youth, age 18, a post as ASSISTANT DRAUGHTSMAN in an Architect's Office. Has had over eighteen months' all-day training in draughtsmanship. Salary at commencement unimportant if prospects good.—F. J., 4 King Edward Avenue, Worthing.

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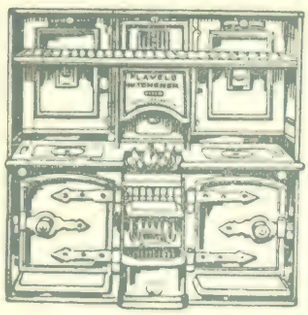

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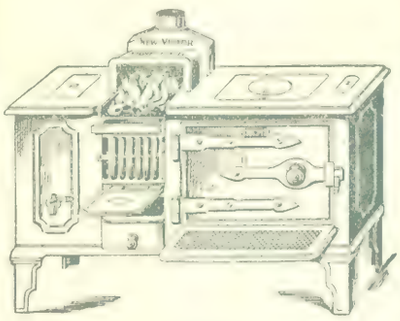

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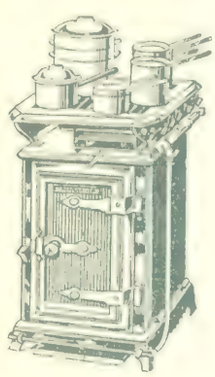

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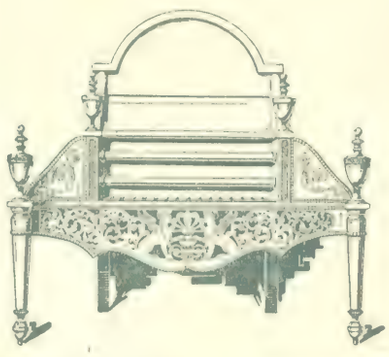

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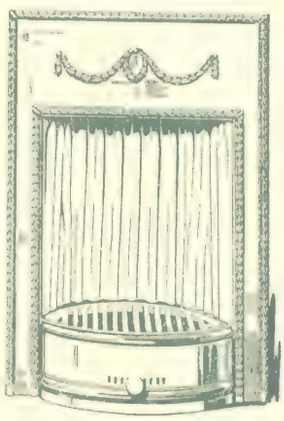

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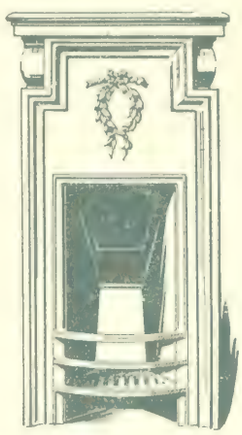

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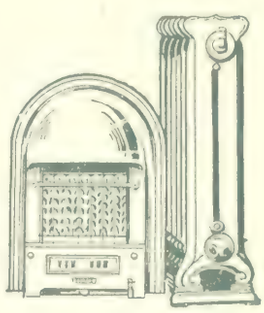

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